CME ACCREDITATION

The ESMRMB 2017 is accredited by the European Accreditation Council for Continuing Medical Education and the European Union of Medical Specialists (EACCME/UEMS). Find more information on p.9
Dear friends, dear colleagues,

It is a great pleasure to welcome you to the 34th annual meeting of the ESMRMB - European Society for Magnetic Resonance in Medicine and Biology in the beautiful city of Barcelona!

The ESMRMB is and remains the premier event to discuss advances in magnetic resonance in Europe. By coming to Barcelona, we say “no” to those who try to use violence to divide us. More than ever, it is important to create a community and to come together to share insights, learn new things and make friends in the friendly, collegial and respectful manner that characterizes our society.

A fantastic team of SPC members and local organisers have, in cooperation with the central office, put together this year’s exciting meeting programme. We have had near record abstract submissions and we can look forward to over 460 oral presentations, more than 190 poster presentations and 15 software exhibits.

Sixteen dedicated teaching sessions and more than twenty scientific sessions cover a diverse range of basic science and clinical topics as well as new developments in data mining and machine learning. We are also very excited to announce an “ESMRMB meets CSMRM” session where experts from Europe and China share state-of-the-art research on brain imaging. Additionally, we are proud to offer three Spanish language sessions with local experts. Based on the very positive feedback from last year’s meeting, we have also decided to increase the number of scientific sessions for which we offer state-of-the-art introductions by experts in the field. This way, the scientific contributions of the sessions can be put into the bigger picture of where science stands.

With such a wide variety of topics and formats we are sure you will have a great time here in Barcelona on the scientific front, but we also encourage you to take advantage of the spectacular cultural and culinary scenes. We highly recommend to take a stroll in the medieval Gothic quarter, learn more about Gaudi’s Modernist architecture and enjoy Barcelona’s lively seafront!

On behalf of all those involved in organising the meeting, we wish you a fruitful congress!
# Scientific Programme at a glance

## Thursday, October 19, 2017

<table>
<thead>
<tr>
<th>Room 8</th>
<th>Level 3</th>
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<tbody>
<tr>
<td>08:00-09:00</td>
<td>Teaching Session (basic) Imaging Methods for Microstructure</td>
<td>Teaching Session (basic) MR-Physics for Radiologists</td>
<td>Teaching Session (advanced) Design and Implementation of RF Coils: Low to High Field Applications</td>
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<tr>
<td>09:15-10:10</td>
<td>Opening Ceremony Sir Peter Mansfield Lecture Beyond Water</td>
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<tr>
<td>10:15-11:15</td>
<td>Plenary Session Microstructure - From Bench to Bedside</td>
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<tr>
<td>11:45-12:45</td>
<td>Teaching Session (advanced) Cardiac MRI</td>
<td>Scientific Session Gadolinium Deposition / Retention</td>
<td>Scientific Session Head, Neck and Spine</td>
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<td>12:50-13:50</td>
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<td>Industry-sponsored Symposium</td>
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<tr>
<td>14:00-15:30</td>
<td>Teaching Session (radiographers) Getting to Grips with Cardiac MRI</td>
<td>Teaching &amp; Scientific Session Diffusion MRI: Methods &amp; Analyses</td>
<td>Scientific Session MR Hardware</td>
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<tr>
<td>15:40-17:10</td>
<td></td>
<td>Scientific Session Quantitative Parameter Mapping</td>
<td>Teaching &amp; Scientific Session MR Spectroscopy Methods</td>
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<td>13:50-15:20</td>
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<td>12:30-13:30</td>
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<td>16:00-17:30</td>
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## Friday, October 20, 2017

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<tbody>
<tr>
<td>08:00-09:00</td>
<td>Teaching Session (advanced) Data Mining in Big Data / Machine Learning</td>
<td>Teaching Session (basic) Quantitative MRI</td>
<td>Teaching Session (advanced) MRI for Radiation Therapy</td>
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<tr>
<td>10:50-12:20</td>
<td>Teaching Session (basic) Imaging Cerebrovascular Reactivity</td>
<td>Scientific Session Clinical Applications in the Brain</td>
<td>Scientific Session Machine Learning and Image Processing</td>
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<td>12:30-13:30</td>
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<td></td>
<td>Scientific Session Image Pulse Sequences and Techniques I</td>
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<tr>
<td>15:40-17:10</td>
<td>Scientific Session Cardiac MRI</td>
<td>Scientific Session Brain Tumours &amp; Psychiatric Disease</td>
<td>Career Session</td>
<td>Scientific Session Image Pulse Sequences and Techniques II</td>
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<td>17:20-18:20</td>
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## Saturday, October 21, 2017

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<tr>
<td>08:00-09:00</td>
<td>Teaching Session (advanced) CEST and Relaxation Enhanced MRI</td>
<td>Teaching Session (basic) Image Registration and Segmentation Algorithms</td>
<td>Teaching Session (advanced) MRI Perfusion in Brain Lesions: Tips and Pitfalls</td>
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<tr>
<td>09:15-10:10</td>
<td>Plenary Session MRI for Neuroscience</td>
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<tr>
<td>10:50-12:20</td>
<td>Teaching Session (advanced) MRI Simulations: Techniques &amp; Tools</td>
<td>Teaching &amp; Scientific Session Breast &amp; Chest - Clinical Applications</td>
<td>Scientific Session Motion, Artefacts and Quality Control</td>
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<td>15:40-17:10</td>
<td>Scientific Session Brain: Focus on fMRI</td>
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<td>16:20-17:30</td>
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<tr>
<td>17:20-18:20</td>
<td>Roundtable Discussion What is the Future of Contrast Agents in MRI?</td>
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<tr>
<td>18:20-18:40</td>
<td>Closing &amp; Awards Ceremony</td>
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</table>

**Meet the Experts - Networking Event**

**ESMRMB Annual Business Meeting**

- **08:00-09:00**: Teaching Session (advanced) Data Mining in Big Data / Machine Learning
- **09:15-10:10**: Opening Ceremony Sir Peter Mansfield Lecture Beyond Water
- **10:15-11:15**: Plenary Session Microstructure - From Bench to Bedside
- **11:45-12:45**: Teaching Session (advanced) Cardiac MRI
- **12:50-13:50**: Industry-sponsored Symposium
- **14:00-15:30**: Teaching Session (radiographers) Getting to Grips with Cardiac MRI
- **15:40-17:10**: Teaching Session (advanced) Personalized Medicine / MR-based Risk Stratification in Personalized Medicine
- **13:50-15:20**: Teaching Session (radiographers) Getting the Best out of 3T: Tips and Tricks
- **16:00-17:30**: Teaching Session (advanced) Cardiac MRI
- **17:20-18:20**: Roundtable Discussion What is the Future of Contrast Agents in MRI?
- **18:20-18:40**: Closing & Awards Ceremony

**Scientific Exhibition - Meet the Authors**

- **08:00-09:00**: Teaching Session (advanced) Data Mining in Big Data / Machine Learning
- **09:15-10:10**: Opening Ceremony Sir Peter Mansfield Lecture Beyond Water
- **10:15-11:15**: Plenary Session Microstructure - From Bench to Bedside
- **11:45-12:45**: Teaching Session (advanced) Cardiac MRI
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<tbody>
<tr>
<td>08:00-09:00</td>
<td>Lightning Talks: Animal Models</td>
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<tr>
<td>09:15-10:10</td>
<td>Lightning Talks: Diffusion and fMRI</td>
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<tr>
<td>11:50-12:20</td>
<td>Lightning Talks: Pulse Sequences and Novel Contrasts</td>
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<tr>
<td>12:30-13:30</td>
<td>Lightning Talks: Quantification and Post-Processing</td>
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<tr>
<td>14:00-15:00</td>
<td>Lightning Talks: Hardware and Safety Contrasts</td>
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<tr>
<td>15:00-15:30</td>
<td>Lightning Talks: Cardiovascular, Breast and Chest Imaging, Musculoskeletal Imaging</td>
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<tr>
<td>15:40-17:10</td>
<td>Lightning Talks: Interventional MRI Image Reconstruction and Processing (16:00 - 16:30)</td>
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<td>17:20-18:20</td>
<td>Lightning Talks: Novel Hardware and Sequences, Neuroimaging - Clinical (16:30 - 17:00)</td>
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<td>17:00-17:30</td>
<td>Lightning Talks: peaks and valleys - MR Spectroscopy, rise of the Machines (16:10 - 16:40)</td>
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<td>10:50-11:20</td>
<td>Lightning Talks: Abdominal Imaging - Clinical, Abdominal Imaging - Preclinical (15:40 - 16:10)</td>
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<tr>
<td>11:20-11:50</td>
<td>Lightning Talks: Clinical Review Posters</td>
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<tr>
<td>12:15-12:45</td>
<td>Lightning Talks: New Contrasts, Diffusion Weighted Imaging, Miscellaneous (11:45 - 12:15)</td>
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<td>13:50-14:50</td>
<td>Lightning Talks: Functional Imaging</td>
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<td>14:50-15:20</td>
<td>Lightning Talks: Body &amp; MSK</td>
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<td>15:00-15:30</td>
<td>Lightning Talks: Software Exhibits</td>
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<tr>
<td>16:40-17:10</td>
<td>Lightning Talks: Abdominal Imaging - Preclinical</td>
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<tr>
<td>16:00-16:30</td>
<td>Lightning Talks: Meeting the Experts - Networking Event</td>
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<tr>
<td>17:00-17:30</td>
<td>Lightning Talks: Spainish Experts Session - Perfusion and Molecular Imaging</td>
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<tr>
<td>10:50-11:50</td>
<td>Lightning Talks: Lightning Talks: Brain and Spine - Clinical Applications</td>
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<tr>
<td>12:15-12:45</td>
<td>Lightning Talks: Lightning Talks: Quantification and Post-Processing</td>
</tr>
</tbody>
</table>
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M. Viallon, Lyon/FR
General Information

Accreditation
The ESMRMB Congress 2017 – 34th Annual Scientific Meeting, Barcelona, Spain, 19/10/2017-21/10/2017 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 20 European CME credits (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.

Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

Badges
It is obligatory for all participants to wear their badges visibly throughout the meeting. In case of loss, a replacement badge will only be provided on full payment of the applicable onsite registration fee. Forgotten badges will be replaced against a deposit of the full onsite registration fee.

Confirmation of payment and attendance
Any congress-related confirmation will be available after the congress in the MyUser Area (login with your last name and Personal ID as printed on your badge) under MyConfirmations.

Congress Language
The official congress language is English.

Members’ Lounge
We would once again like to invite all active regular, fellow, senior, honorary, and radiographer members to join us for free coffee and drinks in the Members’ Lounge on level 2. Check your badge and if you have the following icon on your badge, you are welcome to join the ESMRMB 2017 Members’ Lounge!

Please note that this only applies to members who have paid the 2017 membership dues of the following type: regular, fellow, honorary, senior, radiographer, and corporate (not included: junior, associate, free associate).
General Information

Preview Centre
The Preview Centre is located in Room 9 on level 3. Speakers are requested to contact the Preview Centre and to hand in their Power Point presentation (on USB flash drive) at least 90 minutes before the beginning of the session of their presentation.

Opening hours of the Preview Centre
Wednesday, October 18: 16:00–18:00
Thursday, October 19 – Saturday, October 21: 07:45–18:30

Registration
Onsite registration fees in Euro (€)

Full Fee
Member € 580
Senior Member € 285
Non-Member € 805

Junior*
Member € 200
Non-Member € 405

MR radiographer/technologist**
Member € 200
Non-Member € 405

All prices are excluding VAT.

Reduced congress fees for ESMRMB Members
Reduced congress fees are available for ESMRMB members of the equivalent membership type in good standing who have paid their 2017 membership fee.

* Junior registration applies to students and residents in training. For a junior registration, a copy of the last diploma (bachelor, masters, medical degree) has to be uploaded during online application, sent to the ESMRMB Office or presented at the registration desk onsite. The registration is limited to 6 years following the date of the diploma. Please note that this does not apply for PhD degrees.

** For a reduced registration ticket as MR radiographer/technologist, an attestation of the institution/head of department is required. The document has to be uploaded in the course of the registration process, sent to the ESMRMB Office or presented at the registration desk onsite.

Onsite registration hours
Wednesday, October 18: 15:00–18:00
Thursday, October 19: 07:00–18:00
Friday, October 20: 07:00–18:30
Saturday, October 21: 07:00–15:00
Payment
Onsite, payment can be made by credit card (Visa and Eurocard/Mastercard), debit card or in cash (only Euro).
Please note that cheques will not be accepted.

Terms of cancellation
The ESMRMB offered the option of taking out a cancellation insurance with our partner ‘Europäische Reiseversicherung’ during online pre-registration. The insurance fee depends on the selected ticket and can only be booked during online pre-registration. After finalisation of the registration and/or payment, insurance can no longer be selected.
The refunding of registration fees due to a change of ticket type or cancellation of participation is only possible with a valid insurance.
The ESMRMB itself will not refund any registration fees. All requests must be issued to the ‘Europäische Reiseversicherung’ directly. Refunds will be given according to the terms and conditions of the ‘Europäische Reiseversicherung’; the ESMRMB is not responsible for any refunds of registration fees. Replacement participants will be treated as new registrations and are thus requested to register anew.

Rooms

Entrance Level 1
Registration
Paper Poster and Clinical Review Poster Exhibition
Software Exhibits
ePoster Exhibition
Welcome Reception
“Meet the Expert”

Level 2
Room 3 Lecture Room
Room 4 Lecture Room
VIP Room Members’ Lounge
Coat Check

Level 3
Room 5 Lecture Room
Room 6 Lecture Room
Auditorium / Room 7 Plenary Session Room, Lecture Room
Foyer Auditorium Technical Exhibition
Room 8 Lecture Room
Room 9 Preview Centre (Slide Centre)

Please proceed to pages 174 for the floorplans of the congress venue!
Please note that Rooms 8 and 9 are not wheelchair-accessible.
General Information

Social Event
The Welcome Reception will be held on Level 1 of the congress center on Thursday, October 19, at 18:00, where we also offer a forum for personal contacts with MR experts (Meet the Expert, see p. 168).

Technical Exhibition
Opening hours of the technical exhibition:
Thursday – Saturday: 08:30–17:30

For information on ESMRMB 2017 exhibitors, please refer to page 181.

Wireless LAN - Internet
Wireless LAN will be available to delegates throughout the congress center. This service is provided free of charge to delegates.

Network: ESMRMB
Password: esmrmb2017
Abstracts

ESMRMB 2017 abstracts have been published as an electronic supplement to MAGMA, the official journal of the Society, accessible via the ESMRMB website. The electronic supplement has been published on springerlink.com. It is available on all Springer servers worldwide, and can thus reach a huge audience. The digital object identifier (DOI) ensures that all abstracts of the ESMRMB 2017 meeting are fully citable in literature.

Abstracts, Thursday, October 19, 2017
DOI: 10.1007/s10334-017-0632-1

Abstracts, Friday, October 20, 2017
DOI: 10.1007/s10334-017-0633-0

Abstracts, Saturday, October 21, 2017
DOI: 10.1007/s10334-017-0634-z

ePoster, Paper Poster, Clinical Review Poster, Software Exhibits
DOI: 10.1007/s10334-017-0635-y

Author Index
DOI: 10.1007/s10334-017-0636-x

The complete electronic Book of Abstracts, the learning material of the Teaching Sessions, the Industry Symposia Programmes and the Exhibition Guide are available to all ESMRMB 2017 Congress participants for download at the ESMRMB website, www.esmrmb.org.

Hot Topic Debate

The highly popular debate will take place again this year. Strong opponents have been selected for the Friday evening debate session on “Quantitative relaxation time measurement: boom or bust?”. After each opponent has given a 15-minute statement, the audience is strongly encouraged to actively participate in the debate.

Friday, October 20, 17:20–18:20
Auditorium/Room 7

Lightning Talks

We would like to invite congress participants to join this year’s “Lightning Talks” where authors of designated electronic and paper posters will briefly present their poster to the audience! During the last 30 minutes of each session, the audience and authors will move to the electronic and paper poster exhibition to “meet-the-authors” for a more detailed presentation and to be able to ask questions.
Oral & Paper Poster Presentations as ePosters
Many oral and paper poster presentations are also available as an electronic poster in the ePoster submission system, ePostersLive. You can search for these presentations by presentation number or by author, institution, title, session and topic.

Roundtable Discussion
You will have the opportunity to attend a Roundtable Discussion where three speakers with differing backgrounds and expertise highlight different aspects of the question “What is the future of contrast agents in MRI?”. An expert moderator will lead the interactive and thought-provoking discussion and will also engage you to participate in the session.

Saturday, October 21, from 17:20 to 18:20
Auditorium/Room 7

Scientific Poster Exhibition
ESMRMB 2017 will again stage an electronic scientific exhibition, using ePostersLive. In addition to the electronic posters, there will also be a scientific poster exhibition of 179 traditional paper posters and 24 clinical review posters, which will be mentioned in the respective abstract section of the Meeting Guide. Posters related to the 15 software exhibits as well as posters related to our presentation format VIEWS will also be displayed in the paper poster exhibition area!

Sir Peter Mansfield Lecture
The official opening will be on Thursday, October 19, at 09:15 in the Auditorium/Room 7. The Sir Peter Mansfield Lecture entitled “Beyond Water” will be given by Professor Arend Heerschap (NL) and held right after the opening ceremony from 09:30–10:10 in the main auditorium.

Software Exhibits
This exhibit aims to demonstrate computer applications in information management of magnetic resonance data. It is focused mainly on non-commercial computer-based demonstrations of software programs that manage magnetic resonance data. The Software Exhibit Computer Demonstration with 15 exhibits will be open from Thursday-Saturday on Level 1 of the congress centre. You can meet the presenters of the exhibit on Thursday, October 19, from 14:00 - 15:00 and on Friday, October 20, from 13:50 – 14:50.
Teaching Syllabus
The learning material of the Teaching Sessions is available online at www.esmrmb.org.

Young Investigator Award
The prestigious ESMRMB – Young Investigator Award offers young researchers a unique platform to stand out from the crowd. The competition is open to young clinicians and scientist at the undergraduate, graduate and postgraduate levels under the age of 35. The major criteria for the selection of finalists were the overall achievements of the candidates in MR as documented in their CVs (and publication list), the quality of the published or submitted paper in MAGMA as well as the quality of the submitted paper to the ESMRMB 2017.

The winner will be awarded € 1000.- and the two other finalists € 300.- each. The final decision on the ranking will be made by a jury after listening to the presentations of the finalists at ESMRMB 2017.

More information on our 2017 finalists can be found on page 18.
The award ceremony will take place on Saturday, October 21, at 18:20!
**ePosters at ESMRMB 2017**

**ePosters – Fully digital scientific exhibition**
The electronic format of the scientific exhibition is continued this year at ESMRMB 2017, using ePostersLive. In consideration of requests received at previous annual meetings, ESMRMB also offers a traditional paper poster area and a clinical review poster exhibition.

20 computer workstations have been installed in the ePoster area on Level 1, at which more than 400 electronic exhibits can be viewed by delegates throughout the duration of the congress. Trained staff will explain how to use the system and its advanced search functions.

**Poster Awards**
All electronic exhibits and pdf files of paper posters received by August 24 were reviewed by the Scientific Exhibition Jury, who selected the winners of the following awards: 1 Magna Cum Laude, 2 Cum Laude, 7 Certificates of Merit.

The Poster Award Ceremony will take place on Saturday, October 21 at 18:20 in the Auditorium/Room 7. The winning posters have been marked with a special sign.

**Meet the Authors**
Every electronic poster author has been allocated a specific PC workstation in the ePoster area for a designated timeslot at which they can meet interested conference delegates and authors of related topics to discuss their work. All PCs in the ePoster area are numbered and easy to find. Find out when the authors of the electronic posters of your interest are available for discussion in the “ePoster” part of this programme.
Thursday, October 19, 2017

11:45–12:45  8 Scientific Session

Head, Neck and Spine

18  11:45

Three-dimensional Quantitative Magnetic Resonance Imaging of Carotid Atherosclerotic Plaque
J. Yuan¹, A. Usman¹, P. Ruetten¹, S. Reid², A. Priest³, A. Patterson³, J. Gillard¹, M. Graves¹; ¹Department of Radiology, University of Cambridge, Cambridge/UNITED KINGDOM, ²Healthcare, General Electric, Amersham/UNITED KINGDOM, ³Department of Radiology, Cambridge University Hospitals NHS Foundation Trust, Cambridge/UNITED KINGDOM

14:00–15:30  14 Scientific Session

Musculoskeletal – Clinical Applications

63  14:00

Measurement of vertebral bone marrow proton density fat fraction in children using quantitative water-fat MRI
S. Ruschke¹, A. Pokorney², T. Baum³, H. Eggers¹, J.H. Miller², H.H. Hu², D.C. Karampinos¹; ¹Department of Radiology, Klinikum rechts der Isar, Technical University of Munich, Munich/GERMANY, ²Radiology, Phoenix Children’s Hospital, Phoenix/UNITED STATES OF AMERICA, ³Department of Diagnostic and Interventional Neuroradiology, Klinikum rechts der Isar, Technical University of Munich, Munich/GERMANY

Friday, October 20, 2017

10:50–12:20  27 Scientific Session

Image Pulse Sequences and Techniques I

178  10:50

Optimum actuation of parallel transmit MRI enabled by concurrent monitoring of RF and gradient fields
M. Cavusoglu, B. Dietrich, D.O. Brunner, M. Weiger, K.P. Pruessmann; Institute for Biomedical Engineering, ETH Zurich and University of Zurich, Zurich/SWITZERLAND

ESMRMB YOUNG INVESTIGATOR AWARD

FINALISTS:
Thursday, October 19, 2017

11:45–12:45  8 Scientific Session

Head, Neck and Spine

18  11:45

Three-dimensional Quantitative Magnetic Resonance Imaging of Carotid Atherosclerotic Plaque
J. Yuan¹, A. Usman¹, P. Ruetten¹, S. Reid², A. Priest³, A. Patterson³, J. Gillard¹, M. Graves¹; ¹Department of Radiology, University of Cambridge, Cambridge/UNITED KINGDOM, ²Healthcare, General Electric, Amersham/UNITED KINGDOM, ³Department of Radiology, Cambridge University Hospitals NHS Foundation Trust, Cambridge/UNITED KINGDOM

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JURY:
M. van Osch, Leiden/NL
A. Radjenovic, Leeds/UK
M. Ladd, Heidelberg/DE

Awards will be presented on Saturday during the Closing & Awards ceremony!
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
<th>Authors/Institutions</th>
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<tbody>
<tr>
<td>08:00</td>
<td>1</td>
<td>Teaching Session - Basic</td>
<td>Imaging Methods for Microstructure</td>
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<td>Moderators: R. Deichmann, Frankfurt/DE</td>
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<td>E. Saritas, Ankara/TR</td>
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<tr>
<td>08:00</td>
<td>1</td>
<td>Microstructural tissue properties: basic concepts and measurements</td>
<td>V.G. Kiselev; Dept. of Radiology, Medical Physics, Faculty of Medicine, Medical Center</td>
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<td>University of Freiburg, Freiburg/GERMANY</td>
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<tr>
<td>08:30</td>
<td>2</td>
<td>Diffusion imaging sequences</td>
<td>R.G. Nunes; Institute for Systems and Robotics and Department of Bioengineering,</td>
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<td>Instituto Superior Técnico, Lisbon/PORTUGAL</td>
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<tr>
<td>08:00</td>
<td>2</td>
<td>Teaching Session - Basic</td>
<td>MR-Physics for Radiologists</td>
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<td>Moderators: J.R. Reichenbach, Jena/DE</td>
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<td>E. Scheurer, Basel/CH</td>
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<td>08:00</td>
<td>3</td>
<td>MR image quality</td>
<td>P. Jakob; Experimental Physics 5, University of Würzburg, Würzburg/GERMANY</td>
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<tr>
<td>08:30</td>
<td>4</td>
<td>Basic clinical sequences &amp; tissue contrast</td>
<td>A. Nagel; Institute of Radiology, University Hospital Erlangen, Erlangen/GERMANY</td>
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<tr>
<td>08:00</td>
<td>3</td>
<td>Teaching Session - Advanced</td>
<td>Design and Implementation of RF Coils: Low to High Field Applications</td>
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<td>Moderators: A.O. Rodriguez, Mexico City/MX</td>
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<td>O. Ipek, Lausanne/CH</td>
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<td>08:00</td>
<td>5</td>
<td>RF coil design strategies for low to high field</td>
<td>B. Keil; Mittelhessen University of Applied Sciences (THM), Institute of Medical Physics</td>
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<td>and Radiation Protection, Giessen/GERMANY</td>
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<td>08:30</td>
<td>6</td>
<td>Tips and tricks for building your own coil</td>
<td>A. Webb; Department of Radiology, C. J. Gorter Center for High Field MRI,</td>
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<td>Leiden/NETHERLANDS</td>
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Scientific Programme
THURSDAY, OCTOBER 19, 2017

9:15–10:10 4 Opening Ceremony
Sir Peter Mansfield Lecture

7 09:30–10:10 Beyond water
A. Heerschap; Radiology and Nuclear Medicine, Radboud University Medical Centre, Nijmegen/NETHERLANDS

10:15–11:15 5 Plenary Session
Microstructure - From Bench to Bedside
Moderators: D. Sappey-Marinier, Bron/FR
E.M. Larsson, Uppsala/SE

8 10:15 The bench view
S. Jespersen; Center of Functionally Integrative Neuroscience, Clinical Medicine/Physics and Astronomy, Aarhus University, Aarhus C/DENMARK

9 10:45 The bedside view
D. Sosnovik; Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown, Massachusetts/UNITED STATES OF AMERICA

11:45–12:45 6 Teaching Session - Advanced
Cardiac MRI
Moderators: G. Strijkers, Amsterdam/NL
D. Beitzke, Vienna/AT

10 11:45 Using cardiometabolic MRI to unravel the pathophysiology of obesity: a clinical approach
J.J. Prompers; Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS

11 12:15 Advanced Cardiac MRI in non-ischemic cardiomyopathies
G. Roditi; Radiology, Glasgow Royal Infirmary, Glasgow/UNITED KINGDOM
11:45–12:45 7 Scientific Session
Gadolinium Deposition/Retention
Moderators: D. Schomer, Houston/US
J. Keller, Prague/CZ

12 11:45 In-Depth Characterization of Rat Cerebellar Gadolinium Deposition by Electron Microscopy, and X-Ray Fluorescence Following Gd-Based Chelates Administration

M. Rasschaert¹, J. A Schroeder², K. Medjoubi³, A. Somogyi¹, J.-L. Guerquin-Kern¹, S. Marco⁴, H. Siegmund³, C. Grafe², A. Emerit¹, N. Fretellier¹, J.-M. Idée¹, C. Brochhausen²; ¹Research & Innovation, Guerbet, Roissy CdG Cedex/FRANCE, ²Zentrum für Elektronenmikroskopie, Institut für Pathologie, Universität Regensburg, Regensburg/GERMANY, ³Nanoscopium Beamline, Synchrotron SOLEIL, Saint Aubin/FRANCE, ⁴PSL Research University, INSERM U1196, Institut Curie, Orsay/FRANCE, ⁵CNRS, UMR 9187, Université Paris Saclay, Orsay/FRANCE

13 11:55 Not all macrocyclic contrast agents were born equal.

R. Bonafe¹, A. Coppo², S. Bussi¹, V. Fraimbault³, J. Terretta³, C. Botteron³, A. Fanizzi², E. Delaurentis², S. Colombo Serra¹, F. Maisano¹, F. Tedoldi¹; ¹GI&TO, Bracco Imaging Spa, Colleretto Giacosa/ITALY, ²GI&TO, Bracco Imaging SpA, Colleretto Giacosa/ITALY, ³GI&TO, Bracco Suisse S.A., Geneva/SWITZERLAND

14 12:05 Gd-retention in the rat brain: a Chemist’s view point

S. Aime, E. Gianolio, E. Di Gregorio, P. Bardini, F. Arena; Molecular Biotechnologies and Health Science, University of Torino, Torino/ITALY

15 12:15 Long Term Retention and Speciation of Gadolinium in Cerebellum After Repeated Injection of Gadodiamide or Gadoterate in Healthy Rats

P. Robert¹, S. Fingerhut², V. Vives³, C. Factor³, M. Sperling², M. Rasschaert¹, J.-M. Idée¹, S. Ballet³, C. Factor³, M. Sperling²; ¹Research & Innovation, Guerbet, Roissy CdG Cedex/FRANCE, ²Institute of Inorganic and Analytical Chemistry, University of Muenster, Muenster/GERMANY, ³Research and Innovation, Guerbet, Roissy CdG Cedex/FRANCE


J. Vymazal¹, J. Neburkova², P. Cigler³, M. Dracinsky³, A. Rulseh¹; ¹Radiology, Na Homolce Hospital, Prague/CZECH REPUBLIC, ²Nanochemistry, Institute of Organic Chemistry and Biochemistry, Prague/CZECH REPUBLIC, ³Nanochemistry, Organic Chemistry and Biochemistry, Prague/CZECH REPUBLIC

17 12:35 Pharmacokinetic simulation of Gadolinium in-vivo release from cyclic and linear complexes: dependence on glomerular filtration rate and prognosis of tissue deposits

W.Y. Ussov¹, M.I. Bakhmetjeva², N.V. Savello³, N.L. Shimanovsky⁴; ¹Lab. of Tomography, Institute of Cardiology, Tomsk/ RUSSIAN FEDERATION, ²Department of Mechanics and Mathematics, M.V.Lomonosov Moscow State University, Moscow/ RUSSIAN FEDERATION, ³Drug Development, R-Pharm, Saint-Petersburg/ RUSSIAN FEDERATION, ⁴Molecular Pharmacology, National Research N.I.Pirogov Medical University, Moscow/ RUSSIAN FEDERATION
11:45–12:45  8  Scientific Session

Head, Neck and Spine
Moderators: T. Stöcker, Bonn/DE
    D. Poot, Rotterdam/NL

18  11:45  Three-dimensional Quantitative Magnetic Resonance Imaging of Carotid Atherosclerotic Plaque
J. Yuan¹, A. Usman¹, P. Ruetten¹, S. Reid², A. Priest³, A. Patterson³, J. Gillard¹, M. Graves¹; ¹Department of Radiology, University of Cambridge, Cambridge/UNITED KINGDOM, ²Healthcare, General Electric, Amersham/UNITED KINGDOM, ³Department of Radiology, Cambridge University Hospitals NHS Foundation Trust, Cambridge/UNITED KINGDOM

19  12:05  Improved real-time MRI to visualise velopharyngeal motion during speech using accelerated radial through-time GRAPPA
A.C. Freitas¹, M. Ruthven², R. Boubertakh², M.E. Miquel²; ¹William Harvey Research Institute, Queen Mary University of London, London/UNITED KINGDOM, ²Clinical Physics, Barts Health NHS Trust, London/UNITED KINGDOM

20  12:15  Quantitative Susceptibility Mapping of the Carotid Artery Wall using IDEAL
P. Ruetten, M. Graves, J. Yuan, J. Gillard; Department of Radiology, University of Cambridge, Cambridge/UNITED KINGDOM

21  12:25  Velum movement in speech: can real-time MRI provide new insights?
R. Vadapalli¹, A.S. Vadapalli², V. Mudumba³; ¹radiology, Vijaya diagnostics, Hyderabad/INDIA, ²Medicine, AFMC PUNE, Pune/INDIA, ³Neurosurgery, NIMS, Hyderabad/INDIA

22  12:35  Perinatal exposure to dichloro-bisphenol A alters lipid composition of mouse liver
M. Ruthven¹, A. Freitas², B. Evans³, M. Miquel¹; ¹Clinical Physics, Barts Health NHS Trust, London/UNITED KINGDOM, ²NIHR Cardiovascular Biomedical Research Unit, Queen Mary University of London, London/UNITED KINGDOM, ³Department of Speech, Hearing and Phonetic Sciences, University College London, London/UNITED KINGDOM
Time-resolved, 3-dimensional, 3-directionally velocity sensitive phase-contrast MRI for the investigation of flow patterns in a human pharynx phantom during obstructive sleep apnea

P. Gurumurthy¹, C. Hagen¹, P. Ulloa¹, V. Methot¹, T. H. Oechtering², A. Frydrychowicz², M. A. Koch¹, T. M. Buzug¹; ¹Institute of Medical Engineering, University of Luebeck, Luebeck/GERMANY, ²Clinic for Radiology and Nuclear Medicine, University Hospital Schleswig-Holstein, Luebeck/GERMANY

Non-iterative, retrospective background suppression in time of flight angiography

H. Mattern, A. Sciarrà, O. Speck; Biomedical Magnetic Resonance, Otto-von-Guericke-Universität Magdeburg, Magdeburg/GERMANY

Dynamic CE-MRA with high temporal resolution by combining radial acquisition and variational reconstruction

M. Schloegl¹, G. Reishofer², M. Holler³, T. Benkert⁴, U. Wießpeiner², K. Bredies³, K.T. Block⁵, H. Deutschmann², R. Stollberger¹; ¹Institute of Medical Engineering, Graz University of Technology, Graz/AUSTRIA, ²Neuroradiology, Medical University of Graz, Graz/AUSTRIA, ³Institute of mathematics and scientific computing, University of Graz, Graz/AUSTRIA, ⁴Center for Advanced Imaging Innovation and Research (CAI2R), Department of Radiology, New York University School of Medicine, New York/UNITED STATES OF AMERICA, ⁵Center for Advanced Imaging Innovation and Research (CAI2R), New York University School of Medicine, New York/UNITED STATES OF AMERICA

Exceedingly-small superparamagnetic iron oxide nanoparticles for DCE-MRI and MRA showing renal clearance

M. Kaul¹, H. Wei², O.T. Bruns², E. Hansen², M. Heine², G. Adam¹, H. Ittrich¹; ¹Department of Diagnostic and Interventional Radiology and Nuclear Medicine, University Medical Center Hamburg-Eppendorf, Hamburg/GERMANY, ²Department of Chemistry, Massachusetts Institute of Technology, Cambridge/UNITED STATES OF AMERICA, ³Department of Biochemistry, University Medical Center Hamburg-Eppendorf, Hamburg/GERMANY

FERUMOXYSTOL-ENHANCED MAGNETIC RESONANCE ANGIOGRAPHY (FeMRA) FOR THE ASSESSMENT OF POTENTIAL KIDNEY TRANSPLANT RECIPIENTS

S. Stoumpos¹, M. Hennessy², A. Vesey³, R. Kasthuri², A. Radjenovic¹, D. Kingsmore³, P. Mark¹, G. Roditi²; ¹Cardiovascular Research Centre, University of Glasgow, Glasgow/UNITED KINGDOM, ²Radiology, Queen Elizabeth University Hospital, Glasgow/UNITED KINGDOM, ³Renal & Transplant Unit, Queen Elizabeth University Hospital, Glasgow/UNITED KINGDOM

Real-time Phase-contrast MRI of Deep Venous Flow

A.A. Joseph, K.-D. Merboldt, J. Frahm; Biomedizinische NMR Forschungs GmbH, Max-Planck-Institut für biophysikalische Chemie, Göttingen/GERMANY
11:45–12:15  10 Lightning Talks

**Animal Models**

Moderators: C. Arús, Cerdanyola del Vallès/ES
B. Lizarbe, Lausanne/CH

29  11:45  High resolution NODDI and DTI to highlight hippocampal alterations induced by experimental multiple sclerosis

A. Crombe¹, V. Planche¹, B. Hiba², G. Raffard², B. Brochet¹, V. Dousset¹, S. Oliet¹, T. Tourdiats¹; ¹INSERM U1215, Neurocentre Magendie, Bordeaux/FRANCE, ²CNRS UMR 5536, RMSB, Bordeaux/FRANCE

**MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 19, 12:15-12:45**

30  11:47  Implementation of multimodal MRI-based stereotactic atlases of the Beagle dog

S. Boucher¹, S. Ken², G. Arribarat¹, B. Cartiaux³, H. Gros¹, P. Peran¹, A. Deviers⁴, G. Mogicato⁴; ¹Toulouse NeuroImaging Center, UMR 1214 - INSERM/UPS - ToNIC, Toulouse/FRANCE, ²Department of Medical Physics, Institut Claudius Regaud/Institut Universitaire du Cancer de Toulouse – Oncopole, Toulouse/FRANCE, ³INSERM UMR1037, Cancer Research Center of Toulouse, Oncopole, Toulouse/FRANCE, ⁴Toulouse NeuroImaging Center, UMR 1214 - INSERM/UPS - ToNIC - ENV'T, Toulouse/FRANCE

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**

31  11:49  Longitudinal Shape Analysis of Hippocampus in an experimental model of Alzheimer’s disease

M. Cortés¹, C. Butakoff¹, O. Camara¹, M. Nuñez-Garcia¹, S. Tassani¹, G. Piella¹, M.A. González Ballester¹, R. Tudela², G. Soria³, E. Muñoz-Moreno³, G. Saroma¹; ¹Dept. of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona/SPAIN, ²Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), GIB-UB, Barcelona/SPAIN, ³Experimental 7T MRI Unit, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona/SPAIN

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**


R. Tudela¹, E. Muñoz-Moreno², X. López-Gil², G. Soria²; ¹GIB-UB, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona/SPAIN, ²Experimental 7T MRI Unit, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona/SPAIN

**MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 19, 12:15-12:45**
33 11:53 Functional connectivity changes following distal middle cerebral artery occlusion in the mouse brain
A. Minassian, C. Green, M. Dobrivojevic Radmilovic, D. Wiedermann, M. Diedenhofen, M. Hoehn; In vivo NMR Group, Max Planck Institute for Metabolism Research, Cologne/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45

34 11:55 MRI based pharmacokinetic modeling of a hepatocyte specific contrast agent transport in a mouse model of acute liver failure
K. Byk1, Z. Bartel1, A. Jasztal2, S. Chłopicki2, T. Skórka1; 1Department of Magnetic Resonance Imaging, Institute of Nuclear Physics Polish Academy of Sciences, Krakow/POLAND, 2Laboratory of Experimental Pharmacology of Endothelium, Jagiellonian Centre for Experimental Therapeutics, Krakow/POLAND
MEET THE AUTHOR in the ePoster Area at PC# 17, on Oct. 19, 12:15-12:45

35 11:57 Proton and Fluorine Quantitative MRI in Piglets after Recovery from Different Total Liquid Ventilation Protocols
L. De Rochefort1, G. Guillot2, R.-M. Dubuisson2, M. Kohlhauser3, F. Lidouren3, R. Tissier3; 1CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE, 2IR4M (Imagerie par Résonance Magnétique Médicale et Multi-modalités), Univ. Paris-Sud, CNRS, UMR8081, Université Paris-Saclay, Orsay/FRANCE, 3Inserm, UMR 955, Equipe 3, Univ Paris Est, Ecole Nationale Vétérinaire de Maisons-Alfort, Maisons-Alfort/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 18, on Oct. 19, 12:15-12:45

36 11:59 Muscle T1 and T2 relaxometry in two murine models of dystrophinopathy with different phenotypes
A. Martins Bach1, E.C.A. Araujo1, B. Matot1, Y. Fromes1, P.-Y. Baudin2, I. Richard3, P. Carlier1; 1NMR Laboratory - AIM/CEA, Institute of Myology, Paris/FRANCE, 2CRIS, Consultants for Research in Imaging and Spectroscopy, Tournai/BELGIUM, 3CNRS UMR8115, Genethon, Evry/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 19, on Oct. 19, 12:15-12:45

37 12:01 Hippocampal metabolite changes in the animal model of neurodegeneration measured by localised 1H MRS. The quantification of in vivo 1H MRS data by two programs - jMRUI and LCModel
S. Kašparová, L. Melicherčík, T. Tvrdík, M. Nemec, R. Klepochová; Faculty of Chemical & Food Technology, Slovak University of Technology, Bratislava/SLOVAK REPUBLIC
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45

38 12:03 Effects of subanesthetic ketamine dose in rats - pharmacological MRI study
J. Orzeł1, M. Fiedorowicz1, M. Welniaik-Kaminska1, M. Wieteska1, B. Kossowski2, M. Swiatkiewicz1, P. Bogorodzki1, P. Grieb1; 1Experimental Pharmacology, Mossakowski Medical Research Centre, PAS, Warsaw/POLAND, 2Laboratory of Brain Imaging, Nencki Institute of Experimental Biology, Warsaw/POLAND, 3Faculty of Electronics, Warsaw University of Technology, Warsaw/POLAND
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45
39 12:05  **The Impact of Domestication on Cerebral Metabolite Profiles. 1H MRS Study in Wild vs. Laboratory Rats**
M. Welniak-Kaminska¹, M. Fiedorowicz¹, J. Orzel¹, K. Modlinska², R. Stryjek², P. Bogorodzki³, P. Grileb⁴; ¹Department of Experimental Pharmacology, Small Animal Magnetic Resonance Imaging Laboratory, Mossakowski Medical Research Centre, PAS, Warsaw/ POLAND, ²Department of Comparative and Evolutionary Psychology, Institute of Psychology, Polish Academy of Sciences, Warsaw/POLAND, ³Small Animal Magnetic Resonance Imaging Laboratory, Mossakowski Medical Research Centre, Polish Academy of Sciences, Warsaw/ POLAND, ⁴Department of Experimental Pharmacology, Mossakowski Medical Research Centre, Polish Academy of Sciences, Warsaw/POLAND

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**

40 12:07  **In Vivo Multinuclear ¹H, ¹⁷O, ²³Na MRI and ³¹P MRS of Healthy Rat Brain at 9.4T**
P. Veeraiah¹, C.-H. Choi¹, M. Schöneck¹, A. Willuweit¹, J. Felder¹, K. Ziemons², N.,J. Shah³; ¹Institute of Neuroscience and Medicine -4, Forschungszentrum Jülich (FZJ), Juelich/GERMANY, ²Faculty of Medical Engineering and Technomathematics, FH Aachen University of Applied Sciences, Juelich/Germany, ³Institute of Neuroscience and Medicine -4 / Faculty of Medicine, Forschungszentrum Jülich (FZJ) and RWTH Aachen University, Juelich/ Aachen/GERMANY

**MEET THE AUTHOR in the ePoster Area at PC# 20, on Oct. 19, 12:15-12:45**

41 12:09  **The Effect of Huperzine A on Early Stages of Neurodegeneration in Rat Model: Comparison of in vivo ¹H MRS and MRI Volumetric study.**
Ľ. Melicherčík¹, T. Tvrdašk², M. Krpelánová², S. Kašparová²; ¹Faculty of Chemical & Food Technology, Slovak University of Technology, Bratislava/SLOVAK REPUBLIC, ²Faculty of food and chemical technology, Slovak University of Technology, Bratislava/SLOVAK REPUBLIC

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**

42 12:11  **MATERNAL SUPPLEMENTATION WITH RESVERATROL AND/OR ETHANOL IN HYPOXIC ISCHEMIC INJURY IN RAT NEONATES**
H. Roumes¹, L. Mazuel¹, U. Dumont², B. Daher¹, S. Sanchez¹, J. Blanc¹, V. Bouchaud¹, J.-F. Chateliat¹, M.-C. Beavieux¹, A.-K. Bouzier-Sore¹; ¹CNRS/University of Bordeaux, CRMSB, Bordeaux/FRANCE, ²Institut des Sciences Moléculaires, Université de Bordeaux, Bordeaux/FRANCE

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**

43 12:13  **CEST MRI shows decreased uptake of 2-deoxy-D-glucose in the brain of an Alzheimer’s Disease mouse model.**
D. Tolomeo¹, E. Micotti¹, S. Colombo Serra², G. Forlioni¹; ¹Neuroscience, IRCCS Mario Negri Institute of Pharmacological Research, Milan/ITALY, ²Bioimaging, Bracco Imaging Spa, Colleretto Gicosa/ITALY

**MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 12:15-12:45**
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<th>Session</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tr>
<td>14:00</td>
<td>11 Teaching Session - Radiographers</td>
<td>Getting to Grips with Cardiac MRI</td>
<td>Moderators: T. Leiner, Utrecht/NL</td>
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<td>A. Craddock, Dublin/IE</td>
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<td>CMR: planes, sequences, triggering and gating</td>
<td>A. Fallon; Centre for Cardiovascular Magnetic Resonance, Radiography and Diagnostic Imaging, School of Medicine, Blackrock Clinic, University College Dublin, Dublin/IRELAND</td>
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<td>Ischaemic heart disease</td>
<td>H. Engblom; Lund Cardiac MR Group, Center for Medical Imaging and Physiology</td>
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<td>Skåne University Hospital, Lund/SWEDEN</td>
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<td>15:00</td>
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<td>Getting to Grips with Cardiac MRI - Congenital heart disease</td>
<td>M. Gutberlet; Herzzentrum Leipzig, Universitätsklinik Leipzig, Leipzig/GERMANY</td>
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<tr>
<th>Time</th>
<th>12 Teaching &amp; Scientific Session</th>
<th>Diffusion MRI: Methods &amp; Analyses</th>
<th>Moderators: M. W. Caan, Amsterdam/NL</th>
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<td>V. G. Kiselev; Dept. of Radiology, Medical Physics, Faculty of Medicine, Medical Center, University of Freiburg, Freiburg/GERMANY</td>
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<td></td>
<td>14:00</td>
<td>Introduction</td>
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<td>Diffusion: The Good, the Bad, and the Ugly</td>
<td>V. G. Kiselev; Dept. of Radiology, Medical Physics, Faculty of Medicine, Medical Center, University of Freiburg, Freiburg/GERMANY</td>
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<td>14:20</td>
<td>Slice-wise Outlier Detection (SOLID) of diffusion MRI should be performed prior to motion correction</td>
<td>V. Sairanen1, A. Leemans2, C.m.w. Tax3; HUS Medical Imaging Center, University of Helsinki and Helsinki University Hospital, Helsinki/FINLAND, Image Sciences Institute, University Medical Center Utrecht, Utrecht/NETHERLANDS, CUBRIC, Cardiff University, Cardiff/UNITED KINGDOM</td>
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<td>14:30</td>
<td>Transient Anomalous diffusion $\gamma$ metrics can detect iron accumulation in normal brain aging</td>
<td>M. Guerreri1, A. Caporale1, M. Palombo2, E. Macaluso3, M. Bozzali4, S. Capuani5; Department of anatomical, histological, forensic and of the locomotor system science, Sapienza, Rome/ITALY, CIMIC, Universiti College of London, London/UNITED KINGDOM, ImpAct Team, Lyon Neuroscience Research Center, Lyon/FRANCE, Neuroimaging Laboratory, Santa Lucia Foundation, Rome/Italy, 5 Physics, CNR ISC UOS, Rome/ITALY</td>
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<td>14:40</td>
<td>Comparison of inhomogeneity distortion correction methods in diffusion MRI of the spinal cord</td>
<td>H. Snoussi1, E. Caruyer2, O. Commowick1, A. Kerbrat3, E. Bannier4, C. Barillot1; VisAGeS Research Group, Inria, Rennes/FRANCE, IRSIA UMR 6074, CNRS, Rennes/FRANCE, Neurology, University Hospital of Rennes, Rennes/FRANCE, Neurinfo platform, University Hospital of Rennes, Rennes/FRANCE</td>
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</table>
14:00–15:30 13 Scientific Session

**Room 5**

### 14:00–15:30 MR Hardware

**Moderators:** O. Ipek, Lausanne/CH

M. Zaitsev, Freiburg/DE

#### 14:00 Flexible gradient driver system for a multi-coil setup; design considerations and implementation

**A. Aghaeifar**

1. High-field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY

2. Radiology Department, Leiden University Medical Center, Leiden/NETHERLANDS

#### 14:10 High Field FFC-MRI - A First System for 3T

**M. Bödenler**, A. Petrovic, H. Scharfetter; *Institute of Medical Engineering, Graz University of Technology, Graz/AUSTRIA
<table>
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<th>Time</th>
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<th>Authors</th>
<th>Affiliations</th>
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<tr>
<td>14:20</td>
<td>A Fast Field-Cycling MRI system for clinical applications</td>
<td>P.J. Ross, L. Broche, G. Davies, D. Lurie; Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM</td>
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<td>14:30</td>
<td>Ambient Electromagnetic Noise Reduction for Ultra-Low Field NMR</td>
<td>A. Carey¹, R. Pellicer-Guridi², M.W. Vogel³, S. Crozier¹, V. Vegh¹; ¹School of Information Technology and Electrical Engineering, The University of Queensland, Brisbane/AUSTRALIA, ²Centre for Advanced Imaging, The University of Queensland, Brisbane/AUSTRALIA</td>
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<td>14:40</td>
<td>Towards optical-based real-time evaluation of the local SAR: RF electrical field in biological sample</td>
<td>I. Saniour¹, G. Gaborit², L. Duvillaret³, R. Sablong¹, A.-L. Perrier², O. Beuf³; ¹CREATIS, Univ. Lyon ; CNRS UMR 5220 ; INSERM U1206 ; INSA-Lyon ; UJM-Saint Etienne ; Université Lyon1, Villeurbanne/FRANCE, ²IMEP-LAHC, Univ. Savoie-Mont-Blanc, Le Bourget-Du-Lac/FRANCE, ³kapteos, Kapteos, Sainte-Hélène-Du-Lac/FRANCE</td>
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<td>14:50</td>
<td>Evaluation of RF pulses for 8-channel pTx systems at 7T with respect to hardware constraints and the trade-off between local 10g SAR and excitation accuracy</td>
<td>L. Nohava¹, A. Kuehne², C.S. Aigner³, A. Rund⁴, E. Moser¹, E. Laistler¹, R. Frass-Kriegl¹; ¹Division MR Physics, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna/AUSTRIA, ²GmbH, MRI.Tools, Berlin/GERMANY, ³Graz University of Technology, Institute of Medical Engineering, Graz/AUSTRIA, ⁴University of Graz, Institute for Mathematics and Scientific Computing, Graz/AUSTRIA</td>
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<td>15:00</td>
<td>Decoupling of dipole body antenna array elements by high-impedance metasurface structures at 7 Tesla</td>
<td>A.A. Hurshkainen¹, T.A. Derzhavskaya¹, S.B. Glybovskiy¹, I.J. Voogt², I.V. Melchakova¹, C.A.t. Van Den Berg³, A.J.e. Raaijmakers¹; ¹Department of Nanophotonics and Metamaterials, ITMO University, Saint-Petersburg/RUSSIAN FEDERATION, ²Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, ³Department of Radiotherapy, University Medical Center Utrecht, Utrecht/NETHERLANDS</td>
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<td>15:10</td>
<td>Characterization and comparison of RF MEMS switch for active detuning of endoluminal receiver coils</td>
<td>H. Raki¹, I. Saniour¹, F. Robb², H. Souchay³, S. Lambert¹, O. Beuf¹; ¹CREATIS, Univ. Lyon ; CNRS UMR 5220 ; INSERM U1206 ; INSA-Lyon ; UJM-Saint Etienne ; Université Lyon1, Villeurbanne/FRANCE, ²General Electric Healthcare, General Electric Healthcare, Aurora/UNITED STATES OF AMERICA, ³General Electric Healthcare, General Electric Healthcare, Buc/FRANCE</td>
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<td>15:20</td>
<td>Investigation of the non-linear properties of high sensitivity superconductor radiofrequency coils for magnetic resonance micro imaging</td>
<td>M. Geahel¹, J.-C. Ginefri¹, L. Jourdain¹, G. Willoquet¹, L. De Rochefort², J. Briaticco³, L. Darrasse¹, V.D.B. Cornelis Jacominus¹, M. Poirier-Quinot¹; ¹IR4M (Imagerie par Résonance Magnétique Médicale et Multi-modalités), Univ. Paris-Sud, CNRS, UMR8081, Université Paris-Saclay, Orsay/FRANCE, ²CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE, ³Unité Mixte de Physique, CNRS, Thales., CNRS/Thalès, Palaiseau/FRANCE, ⁴Laboratoire des Solides Irradiés., CEA-CNRS-Ecole polytechnique, Palaiseau/FRANCE</td>
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</table>
14:00–15:30 14 Scientific Session

Musculoskeletal - Clinical Application

Moderator: T. Gerhalter, Paris/FR
A. Bianek-Bodzak, Gdansk/PL

63 14:00 Measurement of vertebral bone marrow proton density fat fraction in children using quantitative water–fat MRI

S. Ruschke¹, A. Pokorney², T. Baum³, H. Eggers⁴, J.H. Miller², H.H. Hu², D.C. Karampinos¹; ¹Department of Radiology, Klinikum rechts der Isar, Technical University of Munich, Munich/GERMANY, ²Radiology, Phoenix Children’s Hospital, Phoenix/UNITED STATES OF AMERICA, ³Department of Diagnostic and Interventional Neuroradiology, Klinikum rechts der Isar, Technical University of Munich, Munich/GERMANY, ⁴Philips Research Laboratory, Philips, Hamburg/GERMANY

64 14:20 Evaluation of fast T1-mapping for monitoring chronic fatty degenerations in dystrophic muscles

B. Marty¹, B. Coppa¹, P.-Y. Baudin², P.G. Carlier¹; ¹NMR Laboratory, Institute of Myology, Paris/FRANCE, ²Research & Development, Consultant for Research in Imaging and Spectroscopy, Tournai/BELGIUM

65 14:30 Physiological and pathological skeletal muscle water T1 changes quantified using fast radial T1 mapping

B. Marty¹, B. Coppa¹, P.-Y. Baudin², P.G. Carlier¹; ¹NMR Laboratory, Institute of Myology, Paris/FRANCE, ²Research & Development, Consultant for Research in Imaging and Spectroscopy, Tournai/BELGIUM

66 14:40 Quantitative Magnetic Resonance Imaging of the skeletal muscle in a multi-center Dysferlinopathy study: Two-year follow-up

F.E. Smith¹, B. Coppa¹, P.-Y. Baudin², P.G. Carlier¹; ¹Institute of Cellular Medicine and Centre for In Vivo Imaging, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM, ²Institute of Genetic Medicine, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM, ³NMR Laboratory, Institute of Myology, Paris/FRANCE

67 14:50 pH evaluation in the exercising muscle by interleaved localized NMR spectroscopy of carnosine and inorganic phosphate

A. Lopez Kolkovsky¹, H. Reyngoudt¹, E. Giacomini¹, F. Niess², M. Meyerspeer², P.G. Carlier¹; ¹Labo RMN AIM-CEA, Association Institut de Myologie, Paris Cedex/FRANCE, ²Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna/AUSTRIA
Evaluation of Foot and Ankle Anatomical Variations and Relationships with Peroneal Tendon Pathologies on Ankle MRI

E. Ersöz, N. Tokgoz, A.Y. Kaptan, A.M. Ozturk, M. Ucar; Radiology, Gazi University Faculty of Medicine, Ankara/TURKEY, Orthopedics and Traumatology, Gazi University Faculty of Medicine, Ankara/TURKEY

Ligament complex in the carpometacarpal joint of the thumb: Assessment using 3D isotropic T1-weighted fast-spin echo indirect MR arthrography

H.J. Choo, S.J. Lee, S. Kim, Y. Park; Radiology, Inje Univeristy Busan Paik Hospital, Busan/KOREA, REPUBLIC OF

WITHDRAWN

14:00–15:30 15 Lightning Talks

Pulse Sequences and Novel Contrasts

Moderators: R. Deichmann, Frankfurt/DE
J. Acosta-Cabronero, London/UK

Prospective Head Motion Correction Using Multiple Tracking Modalities

M. Eschelbach, A. Aghaeifar, E.-M. Engel, K. Scheffler; High-field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY, University Hospital Tuebingen, Department of Prosthodontics and Medical Materials, Tuebingen/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 19, 15:00-15:30

Main Factors in Estimation of Non-excitable area around ferromagnetic objects in MRI

S. Amirrajab, V. Ghodrati, A. Nasiraei Moghaddam; Biomedical Engineering, Amirkabir University of Technology (Tehran Polytechnic), Tehran/IRAN, Physics and Biology in Medicine, University of California, Los Angeles, Los Angeles/UNITED STATES OF AMERICA

MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 19, 15:00-15:30

Space-time variant weighted regularization improves motion reconstruction in compressed sensing accelerated cardiac cine MRI

J. Royuela-Del-Val, A. Godino-Moya, R.M. Menchón-Lara, M. Martín-Fernández, C. Alberola-López; Image Processing Lab, University of Valladolid, Valladolid/Spain

MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 19, 15:00-15:30

Implementation of a Gradient Waveform Pre-emphasis Based on the Gradient Impulse Response Function for a Spiral Sequence


MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 19, 15:00-15:30

Multi-echo Magnetic Resonance Fingerprinting with direct derivation of B0, T2*, and Tx/Rx phase maps

T. Amthor, J. Meineke, K. Sommer, P. Koken, M. Doneva; Tomographic Imaging, Philips Research Europe, Hamburg/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 19, 15:00-15:30
76 14:10  Optimisation of a prostate CEST MRI sequence for multi-pool analysis of z-spectra on a 3T clinical scanner
V. Evans¹, F. Torrealdea¹, M. Rega², S. Punwani¹, X. Golay³, D. Atkinson¹; ¹Centre for Medical Imaging, UCL, London/UNITED KINGDOM, ²Institute of Nuclear Medicine, UCLH, London/UNITED KINGDOM, ³Brain Repair & Rehabilitation, Institute of Neurology, University College London, UK, London/UNITED KINGDOM
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 19, 15:00-15:30

77 14:12  In Vivo ¹⁹F MRI of Monocytes after Myocardial Infarction in Pigs
M. Rothe¹, A. Jahn², B. Schnackenburg³, J. Keupp³, K. Weiss⁴, J.-H. Hwang¹, J. Szendroedi¹, U. Flögel⁵, M. Kelm², J. Schrader⁵, M. Roden¹, F. Bönner²; ¹Institute for Clinical Diabetology, German Diabetes Center at Heinrich Heine University, Leibniz Institute for Diabetes Research, Düsseldorf/Germany, ²Department of Cardiology, Pulmonology and Vascular Medicine, Heinrich Heine University Düsseldorf, Düsseldorf/Germany, ³MRI, Philips Research Europe, Hamburg/Germany, ⁴MRI, Philips Healthcare, Hamburg/Germany, ⁵Department of Molecular Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf/Germany
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

78 14:14  MANGANESE ENHANCED MRI: A METHOD IN ORDER TO VALIDATE PHYSIOLOGICAL MARKERS OF TINNITUS IN ROCENTS
A. Laboulais¹, M. Cardoso¹, S. Gonzalez², G. Naert², Y. Cazals³, A. Noreña³, S. Cosnier-Pucheu², C. Belline², C. Goze-Bac¹; ¹Laboratoire Charles Coulomb, University of Montpellier, Montpellier/France, ²CILcare, CILcare, Montpellier/France, ³UMR 7260, University of Aix-Marseille, Marseille Cedex/France
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

79 14:16  Chemical exchange saturation transfer magnetic resonance imaging of injectable functionalized hyaluronic acid hydrogel
W. Dou¹, X. Song², D. Bermejo³, D. Ossipov³, J.W.m. Bulte², A. Heerschap¹; ¹Department of Radiology and Nuclear Medicine, Radboud University Medical Centre, Nijmegen/Netherlands, ²Department of Radiology and Radiological Science, The Johns Hopkins University School of Medicine, Baltimore/United States of America, ³Department of Chemistry-Ångström, Uppsala University, Uppsala/Sweden
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 19, 15:00-15:30

80 14:18  ¹⁹F MR characterization of molecular oxygen affinity of a new concept of theragnostic nano- and micro-droplets, applied to the in situ mapping of oxygen partial pressure
O. Lorton¹, J.-N. Hyacinthe², R. Salomir¹, S. Desgranges², C. Pépin², L. Gui¹; ¹Radiology, Hôpitaux Universitaires de Genève, Geneva/Switzerland, ²School of Health Science, School of Health Science, Geneva/Switzerland, ³CBSA-IBMM, University of Avignon, Avignon/France
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 19, 15:00-15:30
A multimodal mannose-based contrast agent for lymph nodes and metastasis detection
D. Jiřík1, A. Galisová2, M. Jiratova1, M. Rabyk3, M. Hruby3, M. Hajek1; National
1MR Unit, Department of Radiological and Interventional Radiology, Institute for Clinical
and Experimental Medicine, Prague/CZECH REPUBLIC, 2Department of Diagnostic and
Interventional Radiology, Institute for Clinical and Experimental Medicine, Prague/CZECH
REPUBLIC, 3Institute of Macromolecular Chemistry, Czech Academy of Sciences, Prague/CZECH
REPUBLIC
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 19, 15:00-15:30

Investigation of CEST effects in fixed whole brains and tissue samples: a
combined 3T and 9.4T study
A.-M. Oros-Peusquens1, N. Da Silva2, N.J. Shah1; 1Institute of Neuroscience and
Medicine 4, Forschungszentrum Jülich GmbH, Jülich/GERMANY, 2Institute of Neuroscience and
Medicine (INM-4), Research Centre Jülich, Jülich/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 19, 15:00-15:30

Comparison of High Resolution MRI with X-ray Phase Contrast Imaging
using high resolution Synchrotron Radiation CT : application on
osteóarticular imaging
H. Mathieu1, H. Labriet2, S. Berujon3, E. Brun4; 1Grenoble Institute of Neuroscience,
Inserm U1216, Grenoble/FRANCE, 2R&D, NOVITOM, Grenoble/FRANCE, 3Instrumentation
Services and Development Division, European Synchrotron Radiation Facility, Grenoble/
FRANCE, 4Rayonnement synchrotron et Recherche Médicale, Université Grenoble Alpes,
Grenoble/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 19, 15:00-15:30

On the temperature dependency of the Dipolar Relaxation Time (T1D)
asessed with the modified inhomogeneous magnetization transfer (ihMT)
sequence
V. Carvalho1, O. Girard1, V.h. Prevost1, G. Varma2, D. Alsop2, P. Thureau3, G.
Duhamel1; 1CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE, 2BIDMC,
Harvard Medical School, Boston/UNITED STATES OF AMERICA, 3ICR / UMR 7273 CNRS, Aix
Marseille Université, Marseille/FRANCE
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

Accelerated parameter mapping of multiple-echo, gradient-echo data
using model-based iterative reconstruction
M. Zimmermann, Z. Abbas, K. Dzieciol, N.J. Shah; Institute of Neuroscience and
Medicine - 4, Forschungszentrum Juelich, Juelich/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 19, 15:00-15:30

WITHDRAWN

Feasibility of real-time surface electromyography-triggered diffusion-
weighted imaging for prospective imaging of spontaneous unintentional
focal muscular motion in human calf musculature
M. Schwartz1, P. Martirosian1, G. Steidle3, M. Erb2, B. Yang3, F. Schick1; 1Section
on Experimental Radiology, University Hospital of Tübingen, Tübingen/GERMANY, 2Biomedical
Magnetic Resonance, University Hospital Tübingen, Tübingen/GERMANY, 3Institute of Signal
Processing and System Theory, University of Stuttgart, Stuttgart/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30
**Scientific Programme**
**THURSDAY, OCTOBER 19, 2017**

88 14:32  MRI Sensitivity of Alginate Spheres with Microbubbles to Pressure Changes in Simulated Gastric Conditions

E. Abdurakman¹, M. Bencsik¹, C. Hoad², S. Mcgowan¹, G. Cave³, D. Fairhurst¹, R. Bowtell², P. Gowland²; ¹Department of Physics & Maths, Nottingham Trent University, Nottingham/UNITED KINGDOM, ²Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham/UNITED KINGDOM, ³Department of Chemistry & Forensics, Nottingham Trent University, Nottingham/UNITED KINGDOM

MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 19, 15:00-15:30

89 14:34  On the applicability of balanced SSFP to MR microscopy

S. Bär¹, P. Hucker¹, T. Oerther², M. Wapler³, J. Leupold¹; ¹University Medical Center, University of Freiburg, Faculty of Medicine, University of Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY, ²NMR Microscopy Applications, Bruker Biospin GmbH, Rheinsetten/GERMANY, ³Department of Microsystems Engineering IMTEK, University of Freiburg, Freiburg/GERMANY

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

90 14:36  Multiband RF Pulse design with phase optimisation and SAR and peak RF constraints for parallel transmission at ultra-high fields

B. Eberhardt, J. Felder, N.-J. Shah; Jülich Research Centre, Institute of Neuroscience and Medicine - 4, Jülich/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 19, 15:00-15:30

91 14:38  Optimized adiabatic spin-lock pulses for robust dynamic glucose enhanced MRI at 3T

K. Herz, K. Scheffler, M. Zaiss; High-field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 19, 15:00-15:30

92 14:40  Semi continuous wave CEST with alternating sets of 4 transmit channels at 7T

H. Hoogduin¹, V. Khlebnikov¹, J. Keupp², K.S. Milde¹, L. Knutsson³, P. Van Zijl⁴, P. Luijten¹; ¹Imaging Division, UMC Utrecht, Utrecht/NETHERLANDS, ²MRI, Philips Research Europe, Hamburg/GERMANY, ³Medical Radiation Physics, Lund University, Lund/SWEDEN, ⁴F.M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Johns Hopkins University school of Medicine, Baltimore/UNITED STATES OF AMERICA

MEET THE AUTHOR in the ePoster Area at PC# 17, on Oct. 19, 15:00-15:30

93 14:42  Ultrashort echo-time 2D imaging employing single/double inversion recovery and refocusing-free excitation

Z. Starcuk Jr¹, P. Latta², J. Starčuková¹; ¹Magnetic Resonance, Ustav pristrojove techniky AV CR, v. v. i., Brno/Czech Republic, ²CEITEC, Masarykova univerzita, Brno/CZECH REPUBLIC

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30
Anisotropic Field-of-View support for 3D Golden Angle Kooshball Imaging
G. Krishnamoorthy1, J. Smink2, M. Kouwenhoven2, M. Breeuwer2; 1Department of Biomedical Engineering, Eindhoven University of Technology, Eindhoven/NETHERLANDS, 2MR Clinical Science, Philips Healthcare, Best/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC# 18, on Oct. 19, 15:00-15:30

Improving Spatial Resolution in 2D MR Compressed Sensing using Oblique Scanning
S. Ito1, Y. Sasaki2; 1Graduate School of Eng. Information Systems Science, Utsunomiya University, Utsunomiya/JAPAN, 2Graduate School of Eng. Information and Systems Sciences, Utsunomiya University, Utsunomiya/JAPAN

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

Compressed Sensing based on Non-randomly Under-sampled Signal using Multi-scale Curvelet Transform
S. Ito, R. Kazama; Graduate School of Eng. Information and Systems Sciences, Utsunomiya University, Utsunomiya/JAPAN

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

Banding free bSSFP at long TR values
A. Slawig1, T. Wech1, P. Speier2, B. Petritsch1, R. Ringler3, T. Bley1, H. Köstler1; 1Department of Diagnostic and Interventional Radiology, University Hospital Würzburg, Würzburg/GERMANY, 2DI MR, Siemens Healthineers, Erlangen/GERMANY, 3X-Ray & Molecular Imaging Lab, Technical University Amberg-Weiden, Weiden/GERMANY

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

Cerebrospinal fluid (CSF) flow in the cerebral aqueduct can be quantified with high resolution using magnetic resonance imaging at 7 Tesla
A.P. Narata1, F. Ståhlberg1; 1Lund University Bioimaging Center, Lund University, Lund/SWEDEN, 2Diagnostic Radiology, Faculty of Medicine, Lund University, Lund/SWEDEN

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

Generation of MR-Based Image with Implants from Metal Artifact Reduced CT Image Using Dedicated CT/MR Oral Phantom
M.-Y. Lee, K.-H. Song, B.-Y. Choe, T.-S. Suh; Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 15:00-15:30

G-CASPR and VDRad: extreme cases of a continuum. Intermediate may be better.
A. Godino-Moya, J. Royuela-Del-Val, R.M. Menchón-Lara, M. Martin-Fernández, C. Alberola-López; Image Processing Lab, University of Valladolid, Valladolid/SPAIN

MEET THE AUTHOR in the ePoster Area at PC# 19, on Oct. 19, 15:00-15:30
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>16:30</td>
<td>MRA at 3T: tips and tricks</td>
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<td></td>
<td>H. Kramer; Klinik und Poliklinik für Radiologie, University Hospital Munich, Munich/Germany</td>
</tr>
<tr>
<td>17:00</td>
<td>Fetal and neonatal imaging at 3T: tips and tricks</td>
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<td></td>
<td>C. Malamateniou; Family Care and Mental health, University of Greenwich, London/United Kingdom</td>
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**16:00–17:30 17 Scientific Session**

**Room 6**

**Quantitative Parameter Mapping**

Moderators: D. Poot, Rotterdam/NL

D. Norris, Nijmegen/NL

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>16:00</td>
<td>Quantitative susceptibility mapping from variable flip angle measurements at 3T</td>
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<td>J. Acosta-Cabronero, M. Callaghan; UCL Institute of Neurology, Wellcome Trust Centre for Neuroimaging, University College London, London/United Kingdom</td>
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<tr>
<td>16:10</td>
<td>How do the number of echoes and the echo spacing affect the quality of non-linear field estimates in QSM?</td>
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<td>S. Hubertus, S. Thomas, S. Domsch, L.R. Schad; Computer Assisted Clinical Medicine, Medical Faculty Mannheim, Heidelberg University, Mannheim/Germany</td>
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<tr>
<td>16:20</td>
<td>Iterative Background Phase Correction: Expanding and Improving the Evaluation Range in QSM</td>
</tr>
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<td>J. Lindemeyer, W.A. Worthoff, A. Shymanskaya, N..J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Jülich, Jülich/Germany</td>
</tr>
<tr>
<td>16:30</td>
<td>Detection of pathology in normal-appearing brain regions of relapsing-remitting multiple-sclerotic patients based on accurate mapping of T&lt;sub&gt;2&lt;/sub&gt; relaxation values</td>
</tr>
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<td></td>
<td>T. Shepherd¹, I. Kirov¹, J. Babb¹, M. Bruno², R. E Charlson³, J. Smith², K.T. Block¹, D.K. Sodickson¹, N. Ben-Eliezer⁴; ¹Center for Advanced Imaging Innovation and Research (CAI²R), New York University School of Medicine, New York/United States of America, ²The Bernard and Irene Schwartz Center for Biomedical Imaging, New York University School of Medicine, New York/United States of America, ³Department of Radiology, New York University School of Medicine, New York/United States of America, ⁴Department of Biomedical Engineering, Tel Aviv University, Tel Aviv/Israel</td>
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<td>108</td>
<td>WITHDRAWN</td>
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<tr>
<td>109</td>
<td>16:40 <em><em>T2</em>-mapping of tendon μ-structure changes after mechanical load in an adult bovine animal model using vTE pulse sequences: the role of resolution up to microscopic scale in quantification</em>*</td>
</tr>
<tr>
<td>110</td>
<td>16:50 <strong>Towards 3D single sequence simultaneous T1- and T2-quantification with multicomponent analysis</strong></td>
</tr>
<tr>
<td>111</td>
<td>17:00 <strong>Fast spatially-resolved multi-component T1 and T2 parameter mapping</strong></td>
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**16:00–17:30** 18 Teaching and Scientific Session Room 5

**MR Spectroscopy Methods**

Moderators: A. Henning, Tuebingen/DE, C. Cudalbu, Lausanne/CH

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Authors</th>
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<tbody>
<tr>
<td>16:00</td>
<td>Introduction</td>
<td>A. Henning; Ultra-high field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY</td>
</tr>
<tr>
<td>113</td>
<td>16:20 <strong>Over-discrete SENSE and B0 correction for accelerated 1H FID MRSI of the human brain at 9.4T</strong></td>
<td>S. Nassirpour, P. Chang, A. Henning; Ultra-high field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY</td>
</tr>
<tr>
<td>114</td>
<td>WITHDRAWN</td>
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<td>115</td>
<td>16:30 <strong>Improving the reproducability of GABA+ MRS using spectral registration</strong></td>
<td>Y. Völzke¹, T. Stöcker¹, E. Hattingen², H.Y.T. Desmond³, E. Pracht¹; ¹MR Physics, German Centre for Neurodegenerative Diseases, Bonn/GERMANY, ²Neuroradiology, Dep. of Radiology, University Clinic Bonn, Bonn/GERMANY, ³Centre for Advanced Imaging, University of Queensland, St Lcic/AUSTRALIA</td>
</tr>
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</table>
116 16:40  Do macromolecular and spline baselines affect the metabolite quantification at 9.4T?
T. Borbath¹, I. Giapitzakis¹, A. Henning², S. Venkateshwaran Murali Manohar³;
¹High Field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY,
²Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY

117 16:50  Reproducibility of metabolism measured by 31P MRS in human brain at 7T: a test-retest study
L. Xin¹, Ö. Ipek¹, B. Cuenoud², M. Beaumont², M. Shevyakova², R. Gruetter³;
¹Center for Biomedical Imaging (CIBM), École polytechnique fédérale de Lausanne, Lausanne/SWITZERLAND,
²Nestec Ltd, Vevey/SWITZERLAND, ³Laboratory for Functional and Metabolic Imaging (LIFMET), Department of Radiology,
University of Lausanne and University of Geneva, École Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND

118 17:00  Double- and Triple-Quantum Filtered 23Na NMR in resting skeletal muscle tissue
T. Gerhalter¹, L.V. Gast², B. Marty¹, P.-G. Carlier¹, A.M. Nagel²; ¹NMR Laboratory, Institute of Myology, Paris/FRANCE,
²Institute of Radiology, University Hospital Erlangen, Erlangen/GERMANY

119 17:10  Is cerebral cortex metabolism upon optogenetic and sensory stimulation comparable? A comparative study using opto- and sensory 1H functional MRS
N. Just, L. Wachsmuth, C. Faber; Translational Research Imaging Center, University Hospital of Münster, Münster/GERMANY

16:00–17:30 19 Scientific Session  Room 4

120 16:00  Systematic analysis of hemodynamic and neuronal response under Medetomidine-Isoflurane anesthesia by simultaneous functional MRI and optical Ca²⁺ recordings in rat
T. Van Alst, L. Wachsmuth, F. Albers, F. Schmid, N. Just, C. Faber; Clinical Radiology, University of Münster, Münster/GERMANY

121 16:10  Experimentally derived hemodynamic response functions for fMRI analysis of electric and optogenetic stimulation in rat
H. Lambers, F. Albers, L. Wachsmuth, T. Van Alst, C. Faber; Clinical Radiology, University of Münster, Münster/GERMANY
122 16:20  Awake rat functional magnetic resonance imaging using standard RF-coils and 3D printed restraint parts
P. Stenroos, J. Paasonen, R. Salo, O. Gröhn; Biomedical Imaging Unit, A.I. Virtanen Institute, University of Eastern Finland, Kuopio/FINLAND

123 16:30  Silent High Resolution fMRI with Variable-blipped and RO segmented EPI
P. Liebig¹, R. Heidemann², B. Hensel³, D. Porter⁴; ¹Max Schaldach-Stiftungsprofessur für Biomedizinische Technik, Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen/GERMANY, ²HC Di MR TR, Siemens Healthcare, Erlangen/Germany, ³MEVIS, Fraunhofer, Bremen/GERMANY

124 16:40  Looping Star fMRI: quiet, distortion-free and multi-echo T2*
A.B. Solana¹, A. Menini¹, B. Fernandez², F. Wiesinger¹; ¹ASL Europe, GE Healthcare, Garching B. Munchen/GERMANY, ²Applications and Workflow, GE Healthcare, Orsay FRANCE

125  WITHDRAWN

126 16:50  Distortion and prospective motion corrected zoomed functional imaging of the human brain at 9.4 Tesla
J. Bause¹, A. Aghaeifar², M.-H. In³, E.-M. Engel³, P. Ehses⁴, M. Eschelbach¹, K. Scheffler¹, R. Pohmann¹; ¹High-Field Magnetic Resonance Center, Max Planck Institute for biological Cybernetics, Tuebingen/GERMANY, ²Departments of Radiology, Mayo Clinic Rochester, Minnesota/UNITED STATES OF AMERICA, ³University Hospital Tuebingen, Department of Prosthodontics, Tuebingen/GERMANY, ⁴Department for MR Physics, German Center for Neurodegenerative Diseases (DZNE), Bonn/GERMANY

127 17:00  A comparison of physiological noise removal methods in ultrafast fMRI at 7 Tesla
M. Restuccia¹, J. Jorge², W. Van Der Zwaag³, P. Figueiredo¹; ¹Institute for Systems and Robotics - Lisboa, Instituto Superior Técnico, Universidade de Lisboa, Lisboa/PORTUGAL, ²Laboratory for Functional and Metabolic Imaging, École Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ³Spinoza Centre for Neuroimaging, KNAW, Amsterdam/NETHERLANDS

128 17:10  Improved functional connectivity between the ventromedial prefrontal cortex and amygdala with multi-echo EPI: a resting state analysis
B. Fernandez¹, L. Leuchs², P. Sämann², M. Czisch², V. Spoormaker²; ¹Applications and Workflow, GE Healthcare, Orsay/FRANCE, ²Neuroimaging Unit, Max Planck Institute of Psychiatry, Munich/GERMANY

16:00–17:30 20 Lightning Talks

Body and MSK
Moderator: E. Hecht, New York/US
S. Radjenovic, Leeds/UK

129 16:00  Post Mortem 3T Neonatal High Resolution Isotropic Diffusion Imaging
A. Mcdowell¹, S. Shelmanidine², N. Sebire², D. Carmichael¹, O. Arthur²; ¹Developmental Imaging and Biophysics, UCL Great Ormond Street Institute of Child Health, London/UNITED KINGDOM, ²Department of Radiology, Great Ormond Street Hospital for Children NHS Foundation Trust, London/UNITED KINGDOM

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30
130 16:02  **Background parenchymal enhancement, is it just an innocent effect of estrogen on the breast?**
G. Arslan¹, L. Celik¹, R. Cubuk¹, L. Celik², M.M. Atasoy¹; ¹Radiology, Maltepe University, Istanbul/TURKEY, ²Radiology, Radiologica Imaging Center, Istanbul/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 19, 17:00-17:30

132 16:04  **The relationship between MRI findings and molecular subtypes in women with breast cancer**
V.S. Ozturk¹, F. Taşkıncı¹, R. Ö zgür¹, F. Abacıgil², N. Meydan³, C.Z. Karaman¹; ¹Radiology, Adnan Menderes University Medicine Faculty, Aydın/TURKEY, ²Public Health, Adnan Menderes University Medicine Faculty, Aydın/TURKEY, ³Internal Medicine, Adnan Menderes University Medicine Faculty, Aydın/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 19, 17:00-17:30

133 16:06  **Left ventricular strain and dyssynchrony by Cardiac MR Feature tracking in Idiopathic Pulmonary Arterial Hypertension**
G. Jayasekera, C. Mccomb, K. Mangion, C. Berry, A. Peacock, A. Radjenovic; University of Glasgow, Institute of Cardiovascular and Medical Sciences, Glasgow/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

134 16:08  **The effect of hyperbaric oxygen therapy on myocardial perfusion in elderly subjects assessed by cardiovascular magnetic resonance perfusion**
E. Sasson¹, A. Hadanny², L. Copel³, S. Efrati²; ¹R&D, Wiselimage, Hod Hasharon/ISRAEL, ²Sigol Center for Hyperbaric Medicine and Research, Assaf Harofeh Medical Center, Zerifin/ISRAEL, ³Imaging Department, Assaf Harofeh Medical Center, Zerifin/ISRAEL
MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 19, 17:00-17:30

135 16:10  **Determination of Native T1 and Extracellular Volume Ranges in Cardiovascular Magnetic Resonance Imaging**
A. Fallon¹, A. Cradock², D. Waterhouse³, R. O’Hanlon³, J. McNulty²; ¹Centre for Cardiovascular Magnetic Resonance, ²Radiography and Diagnostic Imaging, School of Medicine, Blackrock Clinic, University College Dublin, Dublin/IRELAND, ³Radiography and Diagnostic Imaging, School of Medicine, University College Dublin, Dublin/IRELAND, ³Centre for Cardiovascular Magnetic Resonance, School of Medicine, Blackrock Clinic, University College Dublin, Dublin/IRELAND
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 19, 17:00-17:30
<table>
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<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Poster Details</th>
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<tbody>
<tr>
<td>136</td>
<td>16:12</td>
<td>GROG based Reconstruction of non-Cartesian MRI using CG-SENSE</td>
<td>I. Aslam, I. Shahzadi, F. Najeeb, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 19, 17:00-17:30</td>
</tr>
<tr>
<td>137</td>
<td>16:14</td>
<td>Cardiovascular MR Image Segmentation in Congenital Heart Disease using a Dilated Convolutional Neural Network</td>
<td>J. Wolterink¹, I. Isgum¹, M. Viergever¹, T. Leiner²; ¹Quantitative Image Analysis, Image Sciences Institute, Utrecht/NETHERLANDS, ²Radiology, Utrecht University Medical Center; Utrecht/NETHERLANDS</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 19, 17:00-17:30</td>
</tr>
<tr>
<td>138</td>
<td>16:16</td>
<td>Dynamic MR Image Reconstruction using L+S Decomposition Model with Different Thresholding Techniques</td>
<td>A. Fatima, S. Qazi, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 19, 17:00-17:30</td>
</tr>
<tr>
<td>139</td>
<td>16:18</td>
<td>Accelerated 3D T2-Mapping of the Prostate in 3.5 min using TV-SENSE Reconstruction</td>
<td>R. Vidya Shankar¹, G. Cruz¹, R. Neji², V. Goh³, R. Botnar¹, C. Prieto¹, I. Dregely¹; ¹Biomedical Engineering, King’s College London, London/UNITED KINGDOM, ²MR Research Collaborations, Siemens Healthcare Limited, London/UNITED KINGDOM, ³Cancer Imaging, King’s College London, London/UNITED KINGDOM</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 19, 17:00-17:30</td>
</tr>
<tr>
<td>140</td>
<td>16:20</td>
<td>Magnetic Resonance Elastography for the prediction of the liver fibrosis in hepatitis C patients.</td>
<td>G.E. Rusak¹, E. Zawada², Z. Serafin²; ¹Department of Radiology and Diagnostic Imagine, University Hospital no. 1 in Bydgoszcz, Bydgoszcz/Poland, ²Radiology and Diagnostic Imagine, University Hospital No.1, Bydgoszcz/Poland</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30</td>
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<tr>
<td>141</td>
<td>16:22</td>
<td>Comparison of different resonator concepts for clinical abdominal $^{23}$Na-sodium imaging at 3T</td>
<td>N.K. Paschke, M. Malzacher, L.R. Schad; Computer Assisted Clinical Medicine, Medical Faculty Mannheim, Heidelberg University, Mannheim/Germany</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30</td>
</tr>
<tr>
<td>142</td>
<td>16:24</td>
<td>R2* quantification for hepatic iron assessment: Comparison of different acquisition and post-processing approaches in a clinical setting</td>
<td>C. Kremser¹, M. Plaikner¹, H. Zoller², W. Jaschke¹, B. Henninger²; ¹Dept. of Radiology, Medical University of Innsbruck, Innsbruck/Austria, ²Department of Internal Medicine, Medical University of Innsbruck, Innsbruck/Austria</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30</td>
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</table>
Quantitative Assessment of Liver Detoxification and Drug Transporter Functions Using by Gadoxetate-Enhanced MRI – A Liver Biopsy and Blood Sample Validated Prospective Study on of Chronic Liver Disease
M.F. Forsgren¹, M. Karlsson¹, O. Dahlqvist Leinhard¹, N. Dahlström¹, B. Norén², T. Romu³, S. Ignatova⁴, M. Ekstedt⁵, S. Kechagias⁶, G. Cedersund⁶, P. Lundberg⁶;
¹Department of Radiological sciences, Department of Medical and Health Sciences, Center for Medical Image Science and Visualization (CMIV), Linköping University, Linköping/SWEDEN, ²Center for Medical Image Science and Visualization (CMIV), Linköping University, Linköping/SWEDEN, ³Department of Biomedical Engineering, Center for Medical Image Science and Visualization (CMIV), Linköping University, Linköping/SWEDEN, ⁴Department of Clinical Pathology and Clinical Genetics, Department of Clinical and Experimental Medicine, Linköping University, Linköping/SWEDEN, ⁵Department of Gastroenterology and Hepatology, Department of Medical and Health Sciences, Linköping University, Linköping/SWEDEN, ⁶Department of Biomedical Engineering, Linköping University, Linköping/SWEDEN
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

Hepatic steatosis in patients after liver transplantation
P. Sedivy¹, M. Drobný¹, M. Dezortova¹, I. Hejlova², M. Cahova³, M. Drab², P. Trunecka², M. Hajek¹; ¹MR-Unit, Dept. Diagnostic and Interventional Radiology, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, ²Hepatogastroenterology Department, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, ³Experimental Medicine Centre, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

Measurements of perfusion and diffusions coefficients derived by intravoxel incoherent motion diffusion-weighted MR imaging of recurrent or residual ovarian cancer.
A. Bianek-Bodzak¹, M. Liro², S. Sawicki², M. Staniszewska¹, M. Walczak¹, D. Wydra²; ¹Department of Applied Medical Techniques, Medical University of Lodz, Lodz/ POLAND, ²Gynaecology, Medical University of Gdansk, Gdansk/POLAND
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 19, 17:00-17:30

DWI-MRI in management of HCC patients; could it differentiate between bland and malignant portal vein thrombosis: thrombosis
M. Rezk¹, A. Fayed²; ¹radiology department, NCI, Cairo/EGYPT, ²radiology department, kasralainy medical school, Cairo/EGYPT
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

GPU Implementation of GRASP for Accelerated Reconstruction in Dynamic Contrast Enhanced MRI
I. Shahzadi, S. Qazi, I. Aslam, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 19, 17:00-17:30
149 16:36  Diffusion Tensor Imaging of the abdominal organs: influence of oriented intravoxel flow compartments
V. Phi Van¹, C. Reiner¹, M. Klarhoefer², C. Rossi¹; ¹Radiology, University Hospital Zürich, Zürich/SWITZERLAND, ²MRI Research, Siemens - Healthcare Switzerland, Zürich/SWITZERLAND

MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

150 16:38  Evaluation of Dixon type MRI sequence for soft tissue segmentation in the pelvis
R. Hammoud, M. McGarry, T. Torfeh, S. Aouadi, P. Petric, N. Al Hammadi; Radiation Oncology, National Center for Cancer Care & Research (NCCCR), Doha/QATAR

MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 19, 17:00-17:30

151 16:40  MRI quantitative evaluation of cervical cancer parametrium invasion
E. Tarachkova¹, M. Shorikov², V. Panov¹, I. Tyurin¹; ¹Radiology, Russian Medical Academy of Continuous Professional Education, Moscow/RUSSIAN FEDERATION, ²Radiology, Russian Cancer Research Center, Moscow/RUSSIAN FEDERATION

MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 19, 17:00-17:30

152 16:42  A Novel Approach to Determine the Hepatic Lipid Composition with 1H MRS
P. Veeraiah¹, K.h.m. Roumans², J.e. Wildberger³, P. Schrauwen¹, Vb. Schrauwen-Hinderling¹, L. Lindeboom¹; ¹Department of Radiology, Human Biology and Human Movement Sciences, NUTRIM School for Nutrition and Translational Research in Metabolism, Maastricht University Medical Centre, Maastricht, Netherlands., Maastricht University, Netherlands, Maastricht/NETHERLANDS, ²Human Biology and Human Movement Sciences, NUTRIM School for Nutrition and Translational Research in Metabolism, Maastricht University Medical Centre, Maastricht, Netherlands., Maastricht University, Netherlands, Maastricht/NETHERLANDS, ³Department of Radiology, Maastricht University Medical Centre, Maastricht University, Netherlands, Maastricht/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 19, 17:00-17:30

153 16:44  MRI local response assessment of transarterial chemoembolization in metastatic liver neuroendocrine tumor patients.
M. Lapteva¹, M. Shorikov¹, O. Sergeeva¹, V. Panov², D. Frantsev¹, E. Virshke¹, B. Dolgushin¹; ¹Radiological, Research Institute of Clinical and Experimental Radiology, Federal State Institution «N.N. Blokhin Russian Cancer Research Center», Russian Ministry of Health, Moscow/RUSSIAN FEDERATION, ²Radiology, Russian Medical Academy of Continuous Professional Education, Moscow/RUSSIAN FEDERATION

MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 19, 17:00-17:30

154 16:46  Assessment of the Peroneus Longus Tendon at the Cuboid Groove using 3D Isotropic Fast Spin-Echo MRI
H.J. Choo, S.J. Lee, S. Kim, Y. Park; Radiology, Inje Univeristy Busan Paik Hospital, Busan/KOREA, REPUBLIC OF

MEET THE AUTHOR in the ePoster Area at PC# 17, on Oct. 19, 17:00-17:30
155 16:48  Learning Curves in Reporting Whole Body MRI with DWIBS in Multiple Myeloma: comparison with whole-body X-Ray scan.
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 17:00-17:30

156 16:50  Compressed Sensing, Half Fourier and Parallel Imaging: Evaluation of different under-sampling techniques for a faster 3D-FSE Proton Density MR of the Knee.
A. Cristobal-Huerta, E.H.G. Oei, G.P. Krestin, J.A. Hernandez-Tamames; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 18, on Oct. 19, 17:00-17:30

157 16:52  Measurements of diffusion and perfusion in vertebral bone marrow using intravoxel incoherent motion (IVIM) with multi-shot, readout-segmented (RESOLVE) echo-planar imaging.
C. Le Ster1, J. Lasbleiz2, R. Guilin2, G. Gambarota2, H. Saint-Jalmes4; 1Healthcare, Siemens, Saint-Denis/FRANCE, 2LTSI, INSERM UMR 1099, Rennes University, Rennes/FRANCE, 3Department of Imaging, Rennes University Hospital, Rennes/FRANCE, 4Centre Eugène Marquis, CRLCC, Rennes/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 19, on Oct. 19, 17:00-17:30

158 16:54  Is Dixon Quantitative Chemical Shift MRI predictive for bone marrow infiltration in patients with multiple myeloma?
S. Berardo, L. Sukhovei, A. Trisoglio, E. Soligo, A. Cassarà, G. Leale, A. Carriero, A. Stecco; AOU Maggiore della Carità, AOU Maggiore della Carità, Novara/ITALY
MEET THE AUTHOR in the ePoster Area at PC# 20, on Oct. 19, 17:00-17:30
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| 08:00–09:00 | 21 Teaching Session - Advanced | Data Mining in Big Data/Machine Learning | Moderator: T. Kuestner, Tuebingen/DE  
H. Huisman, Nijmegen/NL |
| 08:00   | 159              | Machine learning in cardiovascular image analysis | I. Isgum; Image Sciences Institute, University Medical Center Utrecht, Utrecht/NETHERLANDS |
| 08:30   | 160              | Machine learning in oncological image analysis | J.A. Schnabel; Biomedical Engineering, King’s College London, London/UNITED KINGDOM |
| 08:00–09:00 | 22 Teaching Session - Basic | Quantitative MRI | Moderator: R. Pohmann, Tuebingen/DE  
M. Zaitsev, Freiburg/DE |
| 08:00   | 161              | Quantitative relaxation time mapping | R. Deichmann; Brain Imaging Center, University Frankfurt, Frankfurt/main/GERMANY |
| 08:30   | 162              | Quantitative susceptibility mapping | J.R. Reichenbach; Medical Physics Group, Institute of Diagnostic and Interventional  
Radiology, Jena University Hospital - Friedrich Schiller University Jena, Jena/GERMANY |
| 08:00–09:00 | 23 Teaching Session - Advanced | MRI for Radiation Therapy | Moderators: L. Knutsson, Lund/SE  
F. Schick, Tuebingen/DE |
| 08:00   | 163              | Benefits of MRI for radiation therapy | H.-P. Schlemmer; E010 Radiology, German Cancer Research Center, Heidelberg/GERMANY |
| 08:30   | 164              | Combining MRI and radiation therapy: MR linac | B. Raaymakers; Radiotherapy, UMC Utrecht, Utrecht/NETHERLANDS |
| 09:15–10:30 | 24 Plenary Session | BIG DATA FROM COHORT AND CLINICAL STUDIES | Moderators: T. Leiner, Utrecht/NL  
A. van der Lugt, Rotterdam/NL |
| 09:15   | 165              | Benefits and challenges of cohort studies | F. Bamberg; Department of Radiology, University Hospital of Tübingen, Tübingen/GERMANY |
166 09:40 Image acquisition, data management and quality assurance for cohort studies
P. Matthews; UK DRI at Imperial and Division of Brain Sciences, Imperial College London and UK Dementia Research Institute (UKDRI), London/UNITED KINGDOM

167 10:05 Tools and approaches for big data analysis
H. Hahn; Fraunhofer Institute for Medical Image Computing MEVIS, Bremen/GERMANY

10:50–12:20 25 Teaching Session - Basic
Imaging Cerebrovascular Reactivity
Moderators: H. Hoogduin, Utrecht/NL
I. Marshall, Edingurgh/UK

168 10:50 Vasoactive challenges/protocols/methods for imaging cerebrovascular reactivity
E.T. Petersen; Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham/UNITED KINGDOM

169 11:20 BOLD and ASL techniques for imaging cerebrovascular reactivity
M. Shrestha; Danish Research Centre for Magnetic Resonance, Copenhagen University Hospital Hvidovre, Hvidovre/DENMARK

170 11:50 Clinical applications of cerebrovascular reactivity imaging
J. Hendrikse; Radiology, UMC Utrecht, Utrecht/NETHERLANDS

10:50–12:20 26 Teaching and Scientific Session
Machine Learning and Image Processing
Moderators: B. de Vos, Utrecht/NL
D. Poot, Rotterdam/NL

10:50 Introduction
Application of Deep Learning in Medical Imaging: Automatic Localization
B. de Vos; Image Sciences Institute, University Medical Center Utrecht/NETHERLANDS

171 11:10 Automatic reference-free motion artifact detection and quantification in T1-weighted MR images of the head and abdomen
T. Küstner¹, A. Liebgott², L. Mauch², P. Martirosian¹, F. Bamberg³, K. Nikolaou³, B. Yang², F. Schick¹, S. Gatidis³; ¹Section on Experimental Radiology, University Hospital of Tübingen, Tübingen/GERMANY, ²Institute of Signal Processing and System Theory, University of Stuttgart, Stuttgart/GERMANY, ³Department of Radiology, University Hospital of Tübingen, Tübingen/GERMANY

172 11:20 Predict treatment response in drug-naïve patients with schizophrenia based on alterations of whole brain white matter tracts: a machine learning approach
J.-Y. Huang¹, C.-M. Liu², T.-J. Hwang², Y.-J. Chen¹, Y.-C. Hsu¹, H.-G. Hwu², W.-Y.I. Tseng¹; ¹National Taiwan University College of Medicine, Institute of Medical Device and Imaging, Taipei/TAIWAN, ²National Taiwan University Hospital, Department of Psychiatry, Taipei/TAIWAN
173 11:30  Potential Clinical Applications of Brain-age Prediction Based on White Matter Microstructural Properties  
C.-L. Chen¹, P.-Y. Chen², Y.-C. Hsu², W.-Y.I. Tseng²; ¹Graduate Institute of Brain and Mind Sciences, National Taiwan University College of Medicine, Taipei City/TAIWAN, ²Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei/TAIWAN

174 11:40  Standardization of visceral adipose tissue volume and correlation to insulin sensitivity –MR-based results in a large cohort  
J. Machann¹, A. Fritsche², N. Stefan², K. Nikolau³, H.-U. Häring³, F. Schick⁴; ¹Section on Experimental Radiology, Institute for Diabetes Research and Metabolic Diseases (IDM) of the Helmholtz Center Munich at the University of Tübingen, German Centre for Diabetes Research (DZD), Tübingen/GERMANY, ²Department of Endocrinology and Diabetology, Angiology, Nephrology and Clinical Chemistry, University Hospital Tübingen, Germany, Institute for Diabetes Research and Metabolic Diseases (IDM) of the Helmholtz Center Munich at the University of Tübingen, German Centre for Diabetes Research (DZD), Tübingen/GERMANY, ³Department of Diagnostic and Intervventional Radiology, University Hospital of Tübingen, Tübingen/GERMANY, ⁴Section on Experimental Radiology, University Hospital of Tübingen, Tübingen/GERMANY

175 11:50  Estimation of GRAPPA Weight Sets using Low Dimensional Data Representation  
O. Inam¹, M. Qureshi², H. Omer³; ¹Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, ²Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, ³Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN

176 12:00  A 3D Mouse Atlas Tool for improved detection of pancreatic cancer using low field MRI  
J. Brook¹, S. Macholl², J. Candido³, R. Arkell³, J. Hesterman⁴, J. Sosabowski¹; ¹Centre of Molecular Oncology, Barts Cancer Institute, Queen Mary University of London, London/UNITED KINGDOM, ²Contract Research, inviCRO, London/UNITED KINGDOM, ³Centre of Cancer and Inflammation, Barts Cancer Institute, Queen Mary University of London, London/UNITED KINGDOM, ⁴Image Analysis, inviCRO, Boston/UNITED STATES OF AMERICA

177 12:10  Inter-method agreement of automated algorithms for brainstem volume assessment in young children with autism spectrum disorder.  
P. Bosco¹, A. Giuliano¹, J. Delafield-Butt², F. Muratori³, S. Calderoni⁴, A. Retico¹; ¹Pisa, National Institute for Nuclear Physics (INFN), Pisa/ITALY, ²Humanities and Social Science, University of Strathclyde, Glasgow/UNITED KINGDOM, ³Developmental Neuroscience, IRCCS Stella Maris, Pisa/ITALY, ⁴Developmental Neuroscience, IRCCS Stella Maris Foundation, Pisa/ITALY
10:50–12:20 27 Scientific Session

**Image Pulse Sequences and Techniques I**

Moderators: R. Mulkern, Boston/US
R. Bowtell, Nottingham/UK

178 10:50 Optimum actuation of parallel transmit MRI enabled by concurrent monitoring of RF and gradient fields

M. Cavusoglu, B. Dietrich, D.O. Brunner, M. Weiger, K.P. Pruessmann; *Institute for Biomedical Engineering, ETH Zurich and University of Zurich, Zurich/SWITZERLAND*

179 11:10 Combining Virtual Conjugate Coil reconstruction with partial Fourier imaging for maximized utilization of k-space conjugate symmetry

A. Kettinger¹, K. Setsompop², S. Kannengiesser³, F. Breuer⁴, Z. Vidnyanszky¹, M. Blaimer⁴; ¹Brain Imaging Centre, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest/HUNGARY, ²A.A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Charlestown/UNITED STATES OF AMERICA, ³MR Application Predevelopment, Siemens Healthcare GmbH, Erlangen/GERMANY, ⁴Magnetic Resonance and X-ray Imaging Department, Fraunhofer Development Center X-ray Technology (EZRT), Würzburg/GERMANY

180 11:20 Model-based T1 Mapping with Sparsity Constraints Using Single-Shot Inversion-Recovery Radial FLASH

X. Wang¹, V. Roeloffs¹, J. Klosowski¹, Z. Tan¹, D. Voit¹, M. Uecker², J. Frahm¹; ¹Max Planck Institute for Biophysical Chemistry, NMR I, Goettingen/GERMANY, ²Department of Diagnostic and Interventional Radiology, University Medical Center, Goettingen/GERMANY

181 11:30 Experimental study of bias in apparent exchange rate measurements

P. Ulloa, V. Methot, M.A. Koch; *Institute of Medical Engineering, University of Luebeck, Luebeck/GERMANY*

182 11:40 Magnetic Resonance Elastography without oscillating gradients

P.M. Lefebvre¹, K. Tse Ve Koon¹, H. Ratiney¹, O. Beuf¹, E. Brusseau¹, S. Lambert¹, S.J. Glaser², D. Sugny², D. Grenier¹, E. Van Reeth¹; ¹CREATIS, Univ. Lyon ; CNRS UMR 5220 ; INSERM U1206 ; INS-Lyon ; UJMSaint Etienne ; Université Lyon1, Villeurbanne/FRANCE, ²Department of Chemistry, Technische Universität München, Garching/GERMANY, ³ICB, UMR 6303 CNRS-Université de Bourgogne, Dijon/FRANCE

183 11:50 Phaseless super-resolution MRI: improvements based on optical analogy

F. Hennel, R. Tian, M. Engel, K.P. Pruessmann; *Institute for Biomedical Engineering, University of Zurich and ETH Zurich, Zurich/SWITZERLAND*

184 12:00 Compressed Sensing Variable Flip Angle 3D-GRASE for T2-weighted High-Resolution Brain Images

A. Cristobal-Huerta¹, D.H.J. Poot¹, M.W. Vogel², J.A. Hernandez-Tamames¹; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS, ²ASL Scientists Europe, GE Healthcare, Hoevelaken/NETHERLANDS

185 12:10 Flip angle variation for maximum total signal in 3D MPRAGE: in vivo validation of simulation and phantom results

M. Drobnitzky¹, U. Klose²; ¹Siemens Healthcare GmbH, Magnetic Resonance, Erlangen/GERMANY, ²Diagnostic and Interventional Neuroradiology, University Hospital Tuebingen, Tuebingen/GERMANY
10:50–12:20  28 Scientific Session

Preclinical MRS Applications
Moderators: A. Viola, Marseille/France
          A.-K. Bouzier-Sore, Bordeaux/France

186 10:50  MRS as a tool to evaluate treatment strategies in HD: Effects of mutant huntingtin deletion on the indirect striatal pathway in the BACHD mouse model
S. Cuellar Baena¹, R. Cheong², B. Baldo², D. Kirik², Å. Petersén¹; ¹7T National Facility and Diagnostic Radiology Department, Lund University, Lund/Sweden, ²Experimental Medical Sciences, Lund University, Lund/Sweden

187 11:00  Metabolomics of therapy response in preclinical glioblastoma under temozolomide treatment and its relationship with histopathological features: a multi-slice MRSI-based volumetric analysis
N. Arias-Ramos¹, L. Ferrer-Font¹, S. Lope-Piedrafita², V. Mocioiu², M. Julià-Sapé³, M. Pumarola³, C. Arús¹, A.P. Candiota³; ¹Departament de Bioquímica i Biologia Molecular, Universitat Autònoma de Barcelona, Cerdanyola del Vallès/Spain, ²Servei de Ressonància Magnètica Nuclear, Universitat Autònoma de Barcelona, Cerdanyola del Vallès/Spain, ³Institut de Biotecnologia i de Biomedicina (IBB), Universitat Autònoma de Barcelona, Cerdanyola del Vallès/Spain

188 11:10  Session No.28Final Pr.No.188Pres Time11:10 TitleAmide proton signals as pH indicator for in vivo MRS and MRI of the brain – Responses to hypercapnia and hypothermia
T. Watanabe, J. Frahm, T. Michaelis; Biomedizinische NMR Forschungs GmbH, Max-Planck-Institut für biophysikalische Chemie, Göttingen/Germany

189 11:20  Online MRS measurement of extracellular lactate concentration during administration of anti-tumoral drugs in an animal model of glioma
R. Salvati¹, U. Dumont¹, V. Bouchaud², S. Sanchez², N. Pinaud¹, Y. Crémillieux¹; ¹Institut des Sciences Moléculaires, Université de Bordeaux, Bordeaux/France, ²CRMSB, Université de Bordeaux, Bordeaux/France
190 11:30 Study of the variations in lactate levels during in vivo whisker stimulation BY Functional MRI and localized 1H MRS: comparative study between control and shMCT2 rats
J. Blanc1, C. Jollé2, L. Mazuel1, H. Roumes1, N. Déglon3, G. Bonvento4, L. Pellerin2, A.-K. Bouzier-Sore1; 1CNRS/University of Bordeaux, CRMSB, Bordeaux/FRANCE, 2University of Lausanne, Department of Physiology, Lausanne/SWITZERLAND, 3Department of Clinical Neurosciences, Laboratory of Cellular and Molecular Neurotherapies, Lausanne/ SWITZERLAND, 4Institut d’Imagerie Biomédicale (I2BM), Molecular Imaging Center (MiRCan), Fontenay-Aux-Roses/FRANCE

191 11:40 Fatty acids profile during Non Alcoholic Fat Liver Disease progression using Magnetic Resonance Spectroscopy
A. Xavier1, F. Zacconi2, K. Fuenzalida3, S. Uribe4, M. Andia4; 1Biomedical Imaging Center, Pontificia Universidad Católica de Chile, Santiago/CHILE, 2Faculty of Chemistry, Pontificia Universidad Católica de Chile, Santiago/CHILE, 3Instituto de Nutrición y Tecnología de los Alimentos (INTA), Santiago/CHILE, 4Radiology Department, Pontificia Universidad Catolica de Chile, Santiago/CHILE

192 11:50 Diffusion weighted spectroscopy in a model of chronic hepatic encephalopathy at 9.4T
N. Kunz1, L. Xin2, B. Lanz3, R. Gruetter4, C. Cudalbu1; 1Center of Biomedical Imaging (CIBM), Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne/SWITZERLAND, 2Center for Biomedical Imaging (CIBM), École polytechnique fédérale de Lausanne, Lausanne/SWITZERLAND, 3Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham/UNITED KINGDOM, 4Laboratory of Functional and Metabolic Imaging (LIFMET), Ecole Polytechnique Federale de Lausanne (EPFL), Lausanne/SWITZERLAND

193 12:00 Metabolic Changes According to Hepatic Fatty-Acid Composition in High-Fat Diet-Fed Animal Examined Using In Vivo Proton Magnetic Resonance Spectroscopy at 9.4 T
K.-H. Song, M.-Y. Lee, C.-H. Yoo, S.-I. Lim, H.-J. Kim, B.-Y. Choe; Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF

194 12:10 High-fat diet feeding in mice may partially protect the heart from pressure overload induced heart failure - a longitudinal study of cardiac metabolism and function
E. Manders1, D. Abdurrahim1, M. Nabben2, K. Nicolay1, J.J. Prompers1; 1Biomedical Engineering, Eindhoven University of Technology, Eindhoven/NETHERLANDS, 2Department of Genetics and Cell Biology, Maastricht University, Maastricht/NETHERLANDS
INFLUENCE OF ACQUISITION TIME ON THE EVALUATION OF BLOOD BRAIN BARRIER INTEGRITY IN ACUTE ISCHEMIC STROKE

C. Laredo¹, R. Tudela², A. Renú¹, L. Oleaga³, X. Urra¹, L. San-Román³, S. Rudilosso¹, J. Blasco³, Á. Chamorro¹, S. Amaro¹; ¹Neurosciences, Institut d’Investigacions Biomèdiques August Pi i Sunyer, Barcelona/SPAIN, ²GIB-UB, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona/SPAIN, ³Radiology Department, Hospital Clínic de Barcelona, Barcelona/SPAIN

Association between leukoaraiosis and cerebral flow territory alteration in asymptomatic internal carotid artery stenosis

Y.-F. Chen¹, Y.-S. Kuo², S.-C. Tang³, H.-L. Kao⁴, W.-C. Wu⁵; ¹Medical Imaging, National Taiwan University Hospital, Taipei/TAIWAN, ²Radiology, Cathay General Hospital, Taipei/TAIWAN, ³Neurology, National Taiwan University Hospital, Taipei/TAIWAN, ⁴Internal Medicine, National Taiwan University Hospital, Taipei/TAIWAN, ⁵Graduate Institute of Oncology, National Taiwan University, Taipei/TAIWAN

Arterial spin labeling spatial coefficient of variation predicts carotid occlusion side

H.J. Mutsaerts¹, J. Petr², R. Bokkers³, J. Hendrikse⁴, R. Lazar⁵, R. Marshall⁶, I. Asllani⁷; ¹Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, ²PET center, Institute of Radiopharmaceutical Cancer Research, Helmholtz-Zentrum Dresden-Rossendorf, Dresden/GERMANY, ³Dept of Radiology, University Medical Center Groningen, Groningen/NETHERLANDS, ⁴Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, ⁵Dept of Neurology, Columbia University Medical Center, New York/UNITED STATES OF AMERICA, ⁶Dept of Neurology, New York Presbyterian, New York/UNITED STATES OF AMERICA, ⁷Department of Biomedical Engineering, Rochester Institute of Technology, Rochester/UNITED STATES OF AMERICA

Patient-Specific Assessment of Mild Traumatic Brain Injury (mTBI) in Children Using Z-Scored Diffusion Tensor Imaging (DTI)

M. Noseworthy¹, D. Stillo², R. Ho³, J. Connolly⁴, C. Dematteo⁵; ¹Electrical and Computer Engineering, McMaster University, Hamilton/CANADA, ²Biomedical Engineering, McMaster University, Hamilton/CANADA, ³Psychology, Neuroscience and Behaviour, McMaster University, Hamilton/CANADA, ⁴Department of Linguistics & Languages, McMaster University, Hamilton/CANADA, ⁵School of Rehabilitation Science, McMaster University, Hamilton/CANADA

Characterizing hippocampal morphology as a function of ApoE4 allele load in healthy middle-aged individuals

A. Valero¹, C. Butakoff¹, O. Camara¹, M. Núñez-García¹, S. Tassani¹, G. Piella¹, M.A. González Ballester¹, J.D. Gispert², C. Falcón², J.L. Molinuevo², G. Sanroma¹; ¹Dept. of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona/SPAIN, ²Fundació Pasqual Maragall, Barcelonabeta Brain Research Center, Barcelona/SPAIN
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<td>11:50</td>
<td>Motion Artifacts in Standard Clinical Setting Obscure Disease-Specific Differences in Quantitative Susceptibility Mapping</td>
<td>J. Meineke¹, F. Wenzel², I.D. Wilkinson², U. Katscher¹; ¹Tomographic Imaging, Philips Research Europe, Hamburg/Germany, ²Academic Unit of Radiology, University of Sheffield, Sheffield/United Kingdom</td>
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<td>12:00</td>
<td>Noninvasive assessment of brain damage in Progressive Supranuclear Palsy using quantitative MRI</td>
<td>R. Gaurav¹, N. Pyatigorskaya², C. Ewenczyk³, C. Gallea¹, R. Valabrégue¹, F. Gargouri¹, E. Bardinet¹, I. Arnulf⁴, C. Poupon⁵, M. Vidalhèt⁶, S. Lehéricy¹; ¹Center for Neuroimaging Research (CENIR), Brain and Spine Institute (ICM), Paris/France, ²Neuroradiology, APHP, Pitié Salpêtrière, Paris/France, ³Département des Maladies du Système Nerveux, APHP, Pitié Salpêtrière, Paris/France, ⁴Service des pathologies du Sommeil, APHP, Pitié Salpêtrière, Paris/France, ⁵UNIRS, CEA DRF/ISVFJ/NeuroSpin, Gif-Sur-Yvette/France</td>
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<td>12:10</td>
<td>Repeatability of ZTE-based bone maps for PET/MR attenuation correction</td>
<td>G. Delso¹, F. Wiesinger², F. Jansen³; ¹ASL Europe, GE Healthcare, Cambridge/United Kingdom, ²ASL Europe, GE Healthcare, Munich/Germany, ³PET/MR Engineering, GE Healthcare, Waukesha/United States of America</td>
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10:50–12:20 30 Lightning Talks
Diffusion and fMRI
Moderators: H. Kugel, Münster/DE
M. Piccirelli, Zurich/CH

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<td>10:50</td>
<td>An fMRI investigation of the resting-state sensorimotor networks in adults with atypical swallowing</td>
<td>S. Fall¹, N. Pauline², J. Baudel², E. Pailler², O. Baledent¹, S. Dakpé³, S. Testelin³, B. Devauchelle³, P. Goudot², J.-M. Constans⁴; ¹BioFlow Image, University of Picardy, Amiens/France, ²Maxillo Facial Department, Pitié Salpêtrière University Hospital, UPMC Paris 6, Paris/France, ³Maxillo Facial Department, Facing Faces Institute, Amiens University Hospital, Amiens/France, ⁴Radiology Department, Facing Faces Institute, Amiens University Hospital, Amiens/France</td>
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<td>10:52</td>
<td>Neural Correlates of Speed Discrimination in the Elderly</td>
<td>L. Eudave, M. Martínez, E. Luís, M.A. Pastor; Functional Neuroimaging, Centro de Investigación Médica Asociada, Pamplona/Spain</td>
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<td>10:54</td>
<td>Graph Joint ICA as a Method for Network Level Fusion: A Validation Study</td>
<td>F. Keyvanfard, A. N. Moghaddam, A. Nasiraei Moghaddam; Biomedical Engineering, Amirkabir University of Technology (Tehran Polytechnic), Tehran/Iran</td>
</tr>
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207 10:56 Changes in functional brain networks during epileptogenesis in a rodent model of temporal lobe epilepsy
E. Christiaen1, M.-G. Goossens2, B. Descamps1, P. Boon2, R. Raedt2, C. Vanhove3; 1MEDISIP, Department of Electronics and Information Systems, Ghent University, Ghent/BELGIUM, 2LCEN3, Department of Neurology, Ghent University, Ghent/BELGIUM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

208 10:58 Investigation of cognitive impairment in patients with arteriovenous malformations: fMRI study
A. Sokolov1, N. Korno2, A. Efimtsev1, G. Trufanov1, N. Ivanova2, V. Fokin1; 1MRI, North-western Federal Medical Research Centre, Saint-Petersburg/ RUSSIAN FEDERATION, 2Neurology, North-western Federal Medical Research Centre, Saint-Petersburg/ RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 20, 11:50-12:20

209 11:00 Effect of short TRs on fMRI sensitivity while controlling for temporal auto-correlation
A. Mcdowell, D. Carmichael; Developmental Imaging and Biophysics, UCL Great Ormond Street Institute of Child Health, London/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

210 11:02 Olfactory discrimination ability in patients with major depressive episode: An olfactory fMRI study
H. Skeif1, M.N.T.K. Tran Dong1, D. Ducreux2; 1IR4M (UMR8081, CNRS), Saclay University - Paris Sud University, Orsay/FRANCE, 2Neuroradiology, Bicêtre hospital, Le Kremlin Bicêtre/FRANCE
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

211 11:04 Semantic decision task over verbal fluency task to assess language dominance in brain tumor patients
C. Mendez Orellana1, L. Arraño Carrasco2, M. Garcia Valenzuela2, F. Mery Muñoz3; 1UDA Cs de la Salud, Pontificia Universidad Católica, Santiago/CHILE, 2Radiology, Pontificia Universidad Católica, Santiago/Chile, 3Neurosurgery, Pontificia Universidad Católica, Santiago/CHILE
MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 20, 11:50-12:20

212 11:06 Dopaminergic and non-dopaminergic neural substrate in Parkinson’s disease and drug-induced parkinsonism: a resting-state fMRI study
S.W. Oh1, N.-Y. Shin2, S.-K. Lee3, Y. Bak2, P.H. Lee4; 1Radiology, Soochunhyang Univ., Cheonan/KOREA, REPUBLIC OF, 2Radiology, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF, 3Radiology, Yonsei University College of Medicine, Seoul/KOREA, REPUBLIC OF, 4Neurology, Yonsei University College of Medicine, Seoul/KOREA, REPUBLIC OF
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20
Internet addiction: features of neuroimaging diagnosis
A. Efimtsev1, B. Litvintcev2, A. Sokolov3, A. Petrov4, O. Shemchuk5, N. Semibratov3, V. Fokin1; 1MRI, North-western Federal Medical Research Centre, Saint-Petersburg/RUSSIAN FEDERATION, 2Department of Neurology, Medical Academy n.a.S.M.Kirov, Saint-Petersburg/RUSSIAN FEDERATION, 3SIL MRI, North-western Federal Medical Research Centre, Saint-Petersburg/RUSSIAN FEDERATION, 4Department of Psychiatry, City Narcological Hospital, Saint-Petersburg/RUSSIAN FEDERATION, 5Biology, Peterhof Gymnasium n.a. Imperor Aleksandr II, Saint-Petersburg/RUSSIAN FEDERATION
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

Comparison of High Angular Resolution Diffusion Imaging (HARDI) with interlaced Multi-Shell Imaging (MSI) on a clinical scanner.
K. Menon1, J. Sun2, S. Blackband3, B.C. Vemuri2, A. Entezari2, J.R. Forder4; 1Biomedical Engineering, University of Florida, Gainesville/UNITED STATES OF AMERICA, 2Computer and Information Science and Engineering, University of Florida, Gainesville/UNITED STATES OF AMERICA, 3Department of Neuroscience, University of Florida, Gainesville/UNITED STATES OF AMERICA, 4Department of Radiology, University of Florida, Gainesville/UNITED STATES OF AMERICA
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

Closing the Venetian blinds: A processing strategy for correcting stripe artifacts in diffusion MRI data
S. David, A. Heemskerk, M. Viergever, A. Leemans; Image Sciences Institute, University Medical Center Utrecht, Utrecht/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 20, 11:50-12:20

Pixel-wise evaluation of Intravoxel Incoherent Motion MRI: A Bayesian Hierarchical modeling approach
A. Mittermeier1, C. Pirkl1, M.J. Schneider1, K. Parodi2, M. Ingrisch1; 1Josef Lissner Laboratory for Biomedical Imaging, Institute for Clinical Radiology, Ludwig-Maximilians-University Hospital Munich, Munich/GERMANY, 2Department of Medical Phsyics, Ludwig-Maximilians-University Munich, Garching/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 20, 11:50-12:20

Frequency dependence of the extra-axonal diffusion coefficient for OGSE sequences
K. Ginsburger, C. Poupon; UNIRS, CEA DRF/ISVFJ/NeuroSpin, Gif-Sur-Yvette/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 20, 11:50-12:20

Investigation of MRI biomarkers for detecting effects of ionizing radiation
A. Qaisi1, A. Chalmers2, A. Vallatos3, W. Holmes1, L. Gilmour2, K. Stevenson2; 1Institute of Neuroscience and psychology, University of Glasgow, Glasgow/UNITED KINGDOM, 2Institute of Cancer Sciences & Beatson West of Scotland Cancer Centre University of Glasgow, University of Glasgow, Glasgow/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

The effects of b-shell selection on estimation of multi-compartmant microscopic diffusion parameters
R. Dadarwal, A. Moussavi, S. Boretius; Functional Imaging Laboratory, German Primate Center, Göttingen/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20
A correlation study of mean apparent propagator MRI indices using diffusion spectrum imaging datasets
Y.-C. Wei, Y.-C. Hsu, W.-Y.I. Tseng; Institute of Medical Device and Image, National Taiwan University College of Medicine, Taipei/TAIWAN
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

Exploring the link between relative enhanced diffusivity and intravoxel incoherent motion using Monte Carlo simulations
P.T. While, J.R. Teruel, I. Vidic, T.F. Bathen, P.E. Goa; 1Department of Radiology and Nuclear Medicine, St. Olav’s University Hospital, Trondheim/NORWAY, 2Department of Radiology, University of California, San Diego, San Diego/UNITED STATES OF AMERICA, 3Department of Physics, Norwegian University of Science and Technology - NTNU, Trondheim/NORWAY, 4Department of Circulation and Medical Imaging, Norwegian University of Science and Technology - NTNU, Trondheim/NORWAY
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 20, 11:50-12:20

Characterization of CSD fit with different response functions: insights of a residuals based analysis
F. Guo, A. De Luca, C. Tax, M. Viergever, A. Leemans; 1Image Sciences Institute, University Medical Center Utrecht, Utrecht/NETHERLANDS, 2School of Psychology, Cardiff University Brain Research Imaging Centre, Cardiff/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

Diffusion weighted imaging biomarkers of cerebral small vessel disease: comparison of CADASIL with sporadic SVD
A. Fouto, R.G. Nunes, J. Pinto, L. Alves, S. Calado, C. Gonçalves, P. Vilela, M. Viana-Baptista, P. Figueiredo; 1Institute for Systems and Robotics - Lisboa, Instituto Superior Técnico, Universidade de Lisboa, Lisboa/PORTUGAL, 2Servicio de Neurologia, Hospital Egas Moniz, CEDOC, Nova Medical School, Lisboa/PORTUGAL, 3Imaging Department, Hospital da Luz, Lisboa/PORTUGAL
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 20, 11:50-12:20

Diffusion and Perfusion Quantified by Magnetic Resonance Imaging Are Markers of Normal-Pregnancy Placenta Development.
M. Guerreri, S. Capuani, A. Antonelli, L. Manganaro; 1SAIMLAL Dept., Morphogenesis & Tissue Engineering, La Sapienza University of Rome, Rome/ITALY, 2Physics Department Rome, CNR ISC, Rome/ITALY, 3Radiology Dept., Sapienza University of Rome, Rome/ITALY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 20, 11:50-12:20
226 11:32 Diffusion MRI to detect the effects of a high-fat diet in the cerebral response to appetite stimulus in healthy mice
I. Guadilla¹, M.J. Guillén², S. Cerdán García-Esteller², P. López-Larrubia¹;
¹Department of Experimental Models of Human Disease, Instituto de Investigaciones Biomédicas “Alberto Sols” CSIC-UAM, Madrid/SPAIN, ²Department of Experimental Models of Human Disease, Instituto de Investigaciones Biomédicas Alberto Sols, Madrid/SPAIN
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 20, 11:50-12:20

227 11:34 Evaluation of Diffusion Tensor in Trigeminal Nerves after Stereotactic radiosurgery
J. Keller¹, D. Urgošík², J. Vymazal¹; ¹Radiodiagnostics, Na Homolce Hospital, Praha/CZECH REPUBLIC, ²Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital, Praha/CZECH REPUBLIC
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

228 11:36 Investigating complex structural characteristics using diffusion MRI on multi-sectional anisotropic fibre phantoms
E. Farrher¹, K.-H. Cho², R. Buschbeck¹, H.-H. Chiang², M.-J. Chen², F. Grinberg¹, N..J. Shah¹, C.-H. Choi¹, L.-W. Kuo²; ¹Institute of Neuroscience and Medicine - 4, Forschungszentrum Juelich, Juelich/GERMANY, ²Institute of Biomedical Engineering and Nanomedicine, National Health Research Institutes, Miaoli/TAIWAN
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 20, 11:50-12:20

229 11:38 The temporal stability of BOLD fMRI measurements in medetomidine- anesthetized rats
N. Sirmipilatze, J. Baudewig, K. Kötz, S. Boretius; Functional Imaging Laboratory, German Primate Center, Göttingen/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

230 11:40 Modulating the Mirror Neuron System by action observation in right hemiplegic cerebral palsy: a functional MRI study
A. Errante¹, G. Di Cesare², C. Pinardi¹, S. Costi³, S. Sghedoni³, F. Fasano², B. Bressi³, V. Volpe¹, A. Ferrari³, L. Fogassi¹; ¹Department of Medicine and Surgery, University of Parma, Parma/ITALY, ²Department of Robotic, Brain and Cognitive Science, IIT (Italian Institute of Technology), Genova/ITALY, ³Children Rehabilitation Unit, IRCCS S. Maria Nuova Hospital, Reggio Emilia/ITALY, ⁴CUBRIC-Brain Research Imaging Center, Cardiff University, Cardiff/UNITED KINGDOM, ⁵Department of Biomedical, Metabolic Sciences and Neuroscience, University of Modena and Reggio Emilia, Reggio Emilia/ITALY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

231 11:42 Evidence of functional connectivity changes in a picture-naming task after resection of low grade gliomas.
J. Deverdun¹, L. Van Dokkum¹, E. Le Bars¹, N. Menjot De Champfleur¹, G. Herbet², H. Duffau², S. Moritz Gasser²; ¹I2FH - CHU Gui de Chauliac, I2FH - CHU Gui de Chauliac, Montpellier/FRANCE, ²Département de neurochirurgie, Hôpital Gui de Chauliac, Montpellier/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 20, 11:50-12:20
Methodological considerations in designing olfactory fMRI studies.

C. Georgiopoulos¹, S. Witt², S. Haller³, N. Dizdar⁴, H. Zachrisson⁵, M. Engström⁶, E.-M. Larsson⁷; ¹Department of Radiology and Department of Medical and Health Sciences, Linköping University, Linköping/SWEDEN, ²Center for Medical Image Science and Visualization (CMIV), Linköping University, Linköping/SWEDEN, ³Department of Surgical Sciences/Radiology, Uppsala University, Akademiska sjukhuset, Uppsala/SWEDEN, ⁴Department of Neurology and Department of Clinical and Experimental Medicine., Linköping University, Linköping/SWEDEN, ⁵Department of Clinical Physiology and Department of Medical and Health Sciences, Linköping University, Linköping/SWEDEN, ⁶Department of Medical and Health Sciences, Linköping University, Linköping/SWEDEN

MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 11:50-12:20

Changes in the central auditory system associated with presbycusis and tinnitus.

O. Profant¹, J. Tintera², I. Ibrahim², J. Rydlo², M. Jilek³, J. Syka³; ¹Department of Otorhinolaryngology and Head and Neck Surgery, 1st Faculty of Medicine, Charles University in Prague, University Hospital Motol, Prague/CZECH REPUBLIC, ²ZRIR, IKEM, Prague/CZECH REPUBLIC, ³Department of Auditory Neuroscience, Institute of Experimental Medicine, The Czech Academy of Sciences, Prague/CZECH REPUBLIC

MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 20, 11:50-12:20

Recent technical developments and impact on personalized imaging strategies

M. Notohamiprodjo¹, F. Bamberg², S. Gatidis¹; ¹Department of Diagnostic and Interventional Radiology, University Hospital of Tübingen, Tübingen/GERMANY, ²Department of Radiology, University Hospital of Tübingen, Tübingen/GERMANY

Major prevention strategies in imaging for personalized medicine

A. Van Der Lugt; Radiology & Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam/NETHERLANDS

Delineation of Subthalamic Nuclei on 3D High Resolution MRI Templates of In-Vivo Sheep Brains

A. Ella, J. Delgadillo, H. Adriaenssen, P. Chemineau, M. Keller; Department of reproductive physiology and behavior, INRA Centre Val de Loire, Nouzilly/FRANCE
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Number</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>14:00</td>
<td>238</td>
<td>Perfusion alters stiffness of deep gray matter</td>
<td>S. Hetzer¹, P. Birn², A. Fehlner², S. Hirsch¹, F. Dittmann², E. Barnhill², J. Braun², I. Sack²; ¹Berlin Center for Advanced Neuroimaging, Charité - Universitätsmedizin Berlin, Berlin/GERMANY, ²Radiology, Charité - Universitätsmedizin Berlin, Berlin/Germany, ³Medical Informatics, Charité - Universitätsmedizin Berlin, Berlin/GERMANY</td>
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<tr>
<td>14:10</td>
<td>239</td>
<td>Direct reconstruction of tracer kinetic parameters from undersampled DCE-MRI in the liver.</td>
<td>N. Kallistis¹, I. Rowe¹, S. Sourbron²; ¹Leeds Institute of Biomedical and Clinical Sciences, University of Leeds, Leeds/UNITED KINGDOM, ²Division of Biomedical Imaging, University of Leeds, Leeds/UNITED KINGDOM</td>
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<tr>
<td>14:20</td>
<td>240</td>
<td>Potential biases in the analysis of perfusion anisotropy using IVIM imaging</td>
<td>G. Fournet, L. Ciobanu, D. Le Bihan; UNIRS, CEA Saclay/NeuroSpin, Gif-Sur-Yvette/FRANCE</td>
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<td>14:30</td>
<td>241</td>
<td>Evaluation of 3D Arterial Spin Labeling Technique for Perfusion Measurements of Entire Human Kidneys using a Turbo Gradient Spin Echo Sequence</td>
<td>C. Zhang¹, P. Martirosian², M. Schwartz², T. Küstner², F. Schick², K. Nikolaou¹, M. Notohamiprodjo¹; ¹Department of Diagnostic and Interventional Radiology, University Hospital of Tübingen, Tübingen/GERMANY, ²Section on Experimental Radiology, University Hospital of Tübingen, Tübingen/GERMANY</td>
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<tr>
<td>14:40</td>
<td>242</td>
<td>The Impact of Partial Volume Correction on the Repeatability of Perfusion Quantification from Multi-PLD PCASL MRI</td>
<td>M. Zhao¹, M. Mezeu², A.R. Segerdahl³, T.W. Okell³, I. Tracey², Y. Xiao², M. Chappell³; ¹Institute of Biomedical Engineering, University of Oxford, Oxford/UNITED KINGDOM, ²Oxford Centre for Functional Magnetic Resonance Imaging of the Brain (FMRIB), University of Oxford, Oxford/UNITED KINGDOM, ³St Hilda's College, University of Oxford, Oxford/UNITED KINGDOM</td>
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<td>14:50</td>
<td>243</td>
<td>Arterial spin labeling MRI with single-shot spiral acquisitions and concurrent field monitoring</td>
<td>M. Cavusoglu, L. Kasper, K.P. Pruessmann; Institute for Biomedical Engineering, University and ETH Zurich, Zurich/SWITZERLAND</td>
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Using Diffusion Weighted Arterial Spin Labelling to probe Blood Brain Barrier Permeability using a Sleeping Sickness Mouse Model

S. Paterson¹, A. Vallatos¹, L. Gallagher², J. Rodgers³, W. Holmes¹; ¹Institute of Neuroscience and psychology, University of Glasgow, Glasgow/UNITED KINGDOM, ²Institute of Neuroscience and Psychology, University of Glasgow, Glasgow/UNITED KINGDOM, ³Institute of Infection, Immunity and Inflammation, University of Glasgow, Glasgow/UNITED KINGDOM

Optimizing Post Labeling Delays in Multiple-Delay Arterial Spin Labeling MRI for Cerebral Perfusion Imaging

J.G. Woods¹, M. Chappell², T.W. Okell³; ¹Oxford Centre for Functional Magnetic Resonance Imaging of the Brain (FMRIB), University of Oxford, Oxford/UNITED KINGDOM, ²Institute of Biomedical Engineering, University of Oxford, Oxford/UNITED KINGDOM
13:50–15:20 33 ESMRMB meets CSMRM
State of the Art Brain Imaging
Moderators: R. Achten, Ghent/BE
X. Golay, London/UK

CSMRM contribution
Current status of Psychoradiology
Qiyong Gong, MD, PhD
(West China Hospital, Sichuan University)

Imaging biomarkers and computer-aided diagnosis system for Parkinson’s disease
Peiyu Huang, MD, PhD
(The Second Affiliated Hospital, Zhejiang University, School of Medicine)

CEST in central nervous system diseases
Chenyu Yan, MD, PhD
(Henan Provincial People’s Hospital)

ESMRMB contribution
GlucoCEST of the Brain
Mina Kim, PhD
(University College London)

Intracranial vessel wall imaging - state of the art
Anja van der Kolk, MD PhD
(Utrecht University Medical Center)

13:50–15:20 34 Scientific Session
Abdominal Imaging - Clinical Applications
Moderators: G. Bongartz, Basel/CH
H.P. Schlemmer, Heidelberg/DE

246 13:50 Validation of single-kidney glomerular filtration rate measurement with dynamic contrast-enhanced MRI
S. Basak1, A. Banerji1, C. Chrysochou2, A. Odudu2, D. Buckley1, P. Kalra2, S. Sourbron1; 1Division of Biomedical Imaging, University of Leeds, Leeds/UNITED KINGDOM, 2Department of Renal Medicine, Salford Royal NHS Foundation Trust, Salford/UNITED KINGDOM

247 14:00 Quantification of Vascularity and Fibrosis in Pancreas Cancer using DCE-MRI Using Extracellular versus Blood Pool Agents
T. Lin1, R. Jafari1, S. Jambawalikar1, P. Spincemaille2, M. Prince1, H. Remotti3, M. Haghighi3, S. Weisberg3, F. Ahmed1, J. Chabot4, E. Hecht1; 1Radiology, Columbia University Medical Center, New York/UNITED STATES OF AMERICA, 2Radiology, Weill Medical College of Cornell University, New York/UNITED STATES OF AMERICA, 3Pathology, Columbia University Medical Center, New York/UNITED STATES OF AMERICA, 4Surgery, Columbia University Medical Center, New York/UNITED STATES OF AMERICA
248 14:10  CAN DIFFUSION WEIGHTED IMAGING DIFFERENTIATE BETWEEN DIFFERENT GRADES OF CROHN’S DISEASE ACTIVITY? A COMPARISON WITH CONVENTIONAL MR ENTEROGRAPHY AGAINST SIMPLE ENDOSCOPIC SCORING FOR CROHN’S DISEASE (SES-CD)
L. Soydan¹, A.A. Demir², A. Sever²; ¹RADIOLOGY, HAYDARPASA NUMUNE EDUCATION AND RESEARCH HOSPITAL, İstanbul/TURKEY, ²RADIOLOGY, HASEKI EDUCATION AND RESEARCH HOSPITAL, İstanbul/TURKEY, ³Gastroenterology, HAYDARPASA NUMUNE EDUCATION AND RESEARCH HOSPITAL, İstanbul/TURKEY

249 14:20  Low field, open bore MRI proton density fat fraction for steatosis and nonalcoholic steatohepatitis diagnosis: a study in a population of 150 morbidly obese bariatric surgery candidates
P. Garteiser¹, M. Esposito Farese², S. Doblas¹, F. Dib², M. Dioguardi Burgio², V. Vilgrain³, M. Coupaye², P. Jouet², B. Van Beers¹; ¹Lbi, Inserm UMR 1149 - University of Paris Diderot, Paris/FRANCE, ²Inserm CIC-EC 1425, URC HUPNVS, Paris/FRANCE, ³Beaujon Hospital Radiology department, Assistance Publique Hôpitaux de Paris, Clichy/FRANCE, ⁴Louis Mourier Obesity center, Assistance Publique Hôpitaux de Paris, Colombes/FRANCE

250 14:30  The Effect of patient positioning and scan-to-scan repeatability on full volume abdominal cavity MRI measurements of visceral and subcutaneous adipose tissue.
M. Marzetti¹, L. Mccreight², T. Brunton³, S. Docherty³, S. Gandy¹; ¹Medical Physics, NHS Tayside, Dundee/UNITED KINGDOM, ²Division of Molecular and Clinical Medicine, University of Dundee, Dundee/UNITED KINGDOM, ³Radiology, NHS Tayside, Dundee/UNITED KINGDOM

251 14:40  Insignificant prostate cancer in potential candidates of active surveillance according to PRIAS criteria: Utility of PI-RADS version 2 on prostate MRI
C.K. Kim, J.H. Yim; ¹Radiology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul/KOREA, REPUBLIC OF

252 14:50  Quantitative multi-parametric MRI of recurrent prostate cancer post-radiotherapy: a matched case-control study
C. D. Fernandes¹, P.J. Van Houdt¹, S. W. Heijmink², I. Walraven¹, J. De Jong³, H.G. Van Der Poel¹, M. Smolic¹, F.J. Pos¹, U.A. Van Der Heide¹; ¹Radiation Oncology, The Netherlands Cancer Institute, Amsterdam/NETHERLANDS, ²Radiology, The Netherlands Cancer Institute, Amsterdam/NETHERLANDS, ³Pathology, The Netherlands Cancer Institute, Amsterdam/NETHERLANDS, ⁴Urology, The Netherlands Cancer Institute, Amsterdam/NETHERLANDS
253 15:00 **Histogram analysis of low- and high-risk prostate cancer: a comparison between Gaussian and non-Gaussian diffusion**  
**M.G. Di Trani**, A. Caporale¹, M. Nezzo², R. Miano³, A. Mauriello³, P. Bove³, G. Manenti², S. Capuani⁴; ¹Physics, CNR ISC UOS, Sapienza University of Rome, Rome/ITALY, ²Diagnostic and Interventional Radiology, Tor Vergata University of Rome, Rome/ITALY, ³Urology Unit, Experimental Medicine and Surgery, Tor Vergata University of Rome, Rome/ITALY, ⁴Physics Department Rome, CNR ISC, Rome/ITALY

254 15:10 **Synthetic Apparent Diffusion Coefficient for Ultra High b-value Diffusion Weighted Imaging of Prostate**  
**P. Sahoo**¹, R. Rockne¹, A. Jung², P.K. Gupta³, R.K. Gupta³; ¹Division of Mathematical Oncology, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, ²Diagnostic Radiology, City of Hope, Duarte/UNITED STATES OF AMERICA, ³Department of Radiology and Imaging, Fortis Memorial Research Institute, Gurgoun/INDIA

13:50–15:20 **35 Scientific Session**  
**MR Spectroscopy Applications in Human Body and Brain**  
*Moderator: M. McLean, Cambridge/UK*  
L. Lindeboom, Maastricht/NL

255 13:50 **Tumour delineation by FET PET facilitates quantification of metabolites with low SNR using MRSI**  
**J. Mauler**¹, K.-J. Langen¹, A.A. Maudsley², O. Nikoubashman³, C. Filss¹, G. Stoffels¹, N.J. Shah¹; ¹Institute of Neuroscience and Medicine, Forschungszentrum Jülich, Jülich/GERMANY, ²Miller School of Medicine, University of Miami, Miami/UNITED STATES OF AMERICA, ³Department of Diagnostic and Interventional Neuroradiology, RWTH Aachen University, Aachen/GERMANY

256 14:00 **T₁ values of phosphorus metabolites in the human visual cortex at 9.4 T**  
**S. Raju, K. Scheffler, R. Pohmann**;  
Magnetic Resonance Center, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY

257 14:10 **Glutamate neurotransmission investigated by 13C-MRS: first study in Schizophrenia at 3T**  
**A. Anton**¹, B. Lanz², C.J. Gregory¹, C. Chen², S. Zhao³, E.J. Simpson⁴, M.Z.U. Katshu⁴, M. Rathnaiah⁵, R.P. Smallman¹, P.F. Liddle³, S. Conen¹, I.A. Macdonald⁴, P.G. Morris², S.R. Williams³, J. Deakin¹; ¹Neuroscience and Psychiatry Unit, Division of Neuroscience and Experimental Psychology, University of Manchester, Manchester/UNITED KINGDOM, ²Sir Peter Mansfield Imaging Centre, University of Nottingham, Nottingham/UNITED KINGDOM, ³Centre for Imaging Science, University of Manchester, Manchester/UNITED KINGDOM, ⁴Medical School, Queen’s Medical Centre, University of Nottingham, Nottingham/UNITED KINGDOM, ⁵Institute of Mental Health, University of Nottingham, Nottingham/UNITED KINGDOM
258 14:20 Simultaneous detection of water and metabolites alternations under visual stimulation in human visual cortex utilizing metabolite cycled semi-LASER at 9.4T: preliminary results
I.-A. Giapitzakis¹, N. Fichtner², D. Zaldivar³, N. Avdievich⁴, S. Manohar¹, R. Kreis⁵, A. Henning⁶; ¹Ultra High Field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY, ²Dept. of Information Technology and Electrical Engineering, Institute for Biomedical Engineering, ETH & University of Zurich, Zurich/SWITZERLAND, ³Physiology of Cognitive Processes, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY, ⁴Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY, ⁵Radiology and Clinical Research, University of Bern, Bern/SWITZERLAND

259 14:30 Lactate and Glutamine/Glutamine changes following maximal Aerobic Capacity Exercise in Young Athletes at 3T
S. Gazdzinski¹, J. Orzel², M. Madeyski³, B. Kossowski², J. Langfort⁴, P. Grieb⁴, P. Bogorodzki⁵, E. Zawadzka-Bartczak⁶, J. Walecki⁷; ¹MRI, Military Institute of Aviation Medicine, Warsaw/POLAND, ²Department of Experimental Pharmacology, Small Animal Magnetic Resonance Imaging Laboratory, Mossakowski Medical Research Centre, PAS, Warsaw/POLAND, ³Medicine, Military Institute of Aviation Medicine, Warsaw/POLAND, ⁴Experimental Pharmacology, Mossakowski Medical Research Centre, PAS, Warsaw/POLAND, ⁵Faculty of Electronics, Warsaw University of Technology, Warsaw/POLAND, ⁶Internal Medicine, Military Institute of Aviation Medicine, Warsaw/POLAND, ⁷Radiology, Military Institute of Aviation Medicine, Warsaw/POLAND

260 14:40 Dynamic Phosphorus Echo Planar Spectroscopic Imaging (31P-EPSI) of Human Calf Muscles using Flyback readout Trajectories
A. Santos Diaz¹, D. Harasym¹, M. Noseworthy²; ¹School of Biomedical Engineering, McMaster University, Hamilton/CANADA, ²Electrical and Computer Engineering, McMaster University, Hamilton/CANADA

261 14:50 Phosphorus Spectroscopic Imaging and B1+ mapping of human heart using a whole body transmit coil with 16-channel receive array at 7T
L. Valkovic¹, I. Dragou², S. Almujayyaz³, A. Batzakis⁴, L.A.J. Young⁴, L.A.B. Purvis¹, W.T. Clarke¹, T. Wichmann⁴, T. Lanz¹, I. Frollo⁵, S. Neubauer¹, M.D. Robson¹, D. Klomp⁶, C.T. Rodgers¹, M. Noseworthy²; ¹OCMR, RDM Cardiovascular Medicine, University of Oxford, Oxford/UNITED KINGDOM, ²Siemens Healthcare Limited, Siemens, Frimley/UNITED KINGDOM, ³MR Coils, MR Coils BV, Zaltbommel/NETHERLANDS, ⁴Rapid Biomedical GmbH, Rapid, Rimpar/GERMANY, ⁵Department of Imaging Methods, Institute of Measurement Science, Slovak Academy of Sciences, Bratislava/SLOVAK REPUBLIC, ⁶Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS
262 15:00  Fat Fraction correlates with Bone Mineral Density in children. 1H MRS study.  
A. Ivantsova, P. Menshchikov, T. Akhadov, N. Semenova; Institute of Engineering Physics for Biomedicine, National Research Nuclear University MEPhI, Moscow/RUSSIAN FEDERATION, Dynamic of Chemical and Biological Processes, Semenov Institute of Chemical Physics of RAS (ICP RAS), Moscow/RUSSIAN FEDERATION, Radiology, Clinical and Research Institute of Emergency Children’s Surgery and Trauma, Moscow/RUSSIAN FEDERATION

263 15:10  Adipose tissue fatty acid composition displays rapid intraday changes  
J. Lundbom, M. Apostolopoulou, M. Röholing, J. Szendroedi, M. Roden; Institute for Clinical Diabetology, German Diabetes Center, Düsseldorf/GERMANY

13:50–15:20 36 Lightning Talks  
Room 3

Hardware and Safety Contrasts

264 13:50  Integration of ultra-high-strength, multi-scale and switchable gradient systems on a whole-body 3T magnet: diffusion MRI feasibility demonstration  
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 20, 14:50-15:20

265 13:52  In vivo rat sodium imaging at 9.4T using a folded four-ring double-resonant quadrature birdcage coil  
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 20, 14:50-15:20

266 13:54  A NOVEL DESIGN OF MRI VISIBLE PROSTATE BIOPSY NEEDLE  
G. Kasaci, D. Mahcicek, O. Kocaturk; Biomedical Engineering, Bogazici University The Institute of Biomedical Engineering, Istanbul/TURKEY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

267 13:56  Slot Array Birdcage Resonator Using Capacitive Terminations  
D. Koh, J. Felder, N.-J. Shah; Institute of Neuroscience and Medicine, Forschungszentrum Jülich, Jülich/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

268 13:58  Double-Row 16-element Tight-Fit Transceiver Phased Array with High Transmit Performance for Whole Human Brain Imaging at 9.4T.  
N. Avdievich, I. Giapitzakis, A. Henning; Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY, High Field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 20, 14:50-15:20
269 14:00  Safety assessment of copper containing IUDs at 1.5T, 3T and 9.4T  
T. Gaa*, W. Neumann*, M. Malzacher, L.R. Schad, F.G. Zöllner; Computer Assisted Clinical Medicine, Medical Faculty Mannheim, Heidelberg University, Mannheim/GERMANY  
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

270 14:02  Improving performance of linear field generation with multi-coil setup by optimizing coils position  
A. Aghaeifar, A. Loktyushin, M. Eschelbach, K. Scheffler; High-field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY  
MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 20, 14:50-15:20

271 14:04  Pilot Tone based Cardiac Trigger Detection Is Robust Against Variations in Transmitter Placement and Component Initialization  
M. Bacher¹, P. Speier², J. Bollenbeck², M. Fenchel³, R. Stollberger¹; ¹Institute of Medical Engineering, Graz University of Technology, Graz/AUSTRIA, ²DI MR, Siemens Healthineers, Erlangen/GERMANY  
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

272 14:06  Unilateral/Bilateral RF excitation of temporal lobes using a DC-controlled transmit/receive switch and two surface coils  
J. Clément¹, M. Aboukrat¹, R. Gruetter², Ö. Ipek³; ¹LIFMET, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ²Laboratory for Functional and Metabolic Imaging (LIFMET), Department of Radiology, University of Lausanne and University of Geneva, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ³CIBM-AIT, EPFL, Lausanne/SWITZERLAND  
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

273 14:08  MRI examinations in patients with spinal implants - results of an online survey in Germany  
H. Kugel¹, J.H. Terheyden², G. Goshger², J. Schmucker², M. Borowski³, T. Schulte⁴; ¹Department of Clinical Radiology, University of Münster, Münster/GERMANY, ²Department of Orthopedics and Tumor Orthopedics, University of Münster, Münster/GERMANY, ³Institute of Biostatistics and Clinical Research, University of Münster, Münster/GERMANY, ⁴Department of Orthopedics and Trauma Surgery, St. Josef-University Hospital, Ruhr-University Bochum, Bochum/GERMANY  
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

274 14:10  MR-Compatible 5.5” OLED display for fMRI  
Y. Ko, J. Felder, N.-J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Juelich, Juelich/GERMANY  
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 20, 14:50-15:20
275 14:12 A Highly Efficient 250 W Digitally Controlled Supply-Modulated Modified Class-E Amplifier for on-Coil Implementation in 1.5T MRI
F.T. Zahra¹, B. Silemek¹, R. Poni², B.N. Ashfaq¹, E. Atalar¹; ¹National Magnetic Resonance Research Center (UMRAM), Bilkent University, Ankara/TURKEY, ²Engineering Consultant, ValoTec, Paris/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 20, 14:50-15:20

276 14:14 Decoupling strategies for multinuclear RF coils for MRI at 7.0 T
F. Maggiorelli¹, E.B. Boskamp², G. Tiber³, A. Retico⁴, J.D. Kaggle⁵, M.R. Symms⁶, F. Robb⁷, M. Tosetti⁸; ¹Physical sciences, earth and environment, University of Siena, INFN, lmag07 Foundation, Pisa/ITALY, ²Healthcare, GE, San Diego/UNITED STATES OF AMERICA, ³Laboratory of Magnetic Resonance, Imago7 Foundation, Pisa/ITALY, ⁴Pisa Division, National Institute for Nuclear Physics, Pisa/ITALY, ⁵Radiology, University of Cambridge, Cambridge/UNITED KINGDOM, ⁶Imago7 Foundation, GE Healthcare, Pisa/ITALY, ⁷Healthcare, GE, Aurora/UNITED STATES OF AMERICA
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 20, 14:50-15:20

277 14:16 A study of NOE enhancement in 31P MR spectroscopy with respect to 1H coil quality and size in a double-tuned coil at 3T
C.-H. Choi, Y. Ha, P. Chervakov, N.J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Juellig, Juellig/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 20, 14:50-15:20

278 14:18 An 8-channel receive-only phased array and detunable transmit birdcage for 17O brain imaging at 7T
W. Cai¹, M. Ladd², R. Umatham²; ¹Erwin L. Hahn Institute for Magnetic Resonance Imaging, University Hospital Essen, University Duisburg-Essen, Essen/GERMANY, ²Medical Physics in Radiology, German Cancer Research Center (DKFZ), Heidelberg/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 20, 14:50-15:20

279 14:20 Wireless Digital Data Transfer using Millimetre-Waves in MRI system
Y. Ko, W. Bi, J. Felder, N.J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Juellig, Juellig/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 20, 14:50-15:20

280 14:22 Multi-Coil Shimming System for an Electropermanent Magnet MRI System
J.P. Rigla Pérez¹, D. Grau-Ruiz², A. Nacev³, G. Puchalt², L. Hernández², J.M. González², E. Díaz-Caballero¹, H. Sánchez-Izquierdo², J.M. Benlloch²; ¹Research and development, Tesoro Imaging S.L., Alicante/SPAIN, ²Instituto de Instrumentación para Imagen Molecular (IMI), Universitat Politècnica de València, Valencia/SPAIN, ³Reasearch and Development, Weinberg Medical Physics, Rockville/UNITED STATES OF AMERICA
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

281 14:24 The issue of Gd-retained in tissues. Insights on the role of metal complex stability by comparing metal uptake upon the concomitant administration of La- and Gd-DTPA
E. Gianolio, E. Di Gregorio, G. Ferrauto, S. Aime; Molecular Biotechnologies and Health Science, University of Torino, Torino/ITALY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20
Optimisation of RF heating assessment at 7 Tesla with proton resonance frequency (PRF)- MR thermometry
H. Jeong\textsuperscript{1}, P. Jezzard\textsuperscript{1}, A. Hess\textsuperscript{2}; \textsuperscript{1}Nuffield Department of Clinical Neurosciences, FMRIB Centre, University of Oxford, Oxford/UNITED KINGDOM, \textsuperscript{2}Department of Cardiovascular Medicine, Department of Cardiovascular Medicine, University of Oxford, Oxford/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Efficient Ripple Current Reduction in Gradient Array System Using Optimized Phase Control Signals with One Stage LC Filter
S. Taraghinia\textsuperscript{1}, K. Ertan\textsuperscript{1}, A.B. Yardim\textsuperscript{2}, E. Atalar\textsuperscript{1}; \textsuperscript{1}National Magnetic Resonance Research Center (UMRAM), Bilkent University, Ankara/TURKEY, \textsuperscript{2}Electrical and Electronics Engineering, Bilkent University, Ankara/TURKEY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Implementation of a quadrature-compensated, double-tuned coil at 9.4T
Y. Ha, C.-H. Choi, N.J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Juelich, Juelich/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 20, 14:50-15:20

Design of an RF coil for a single-side MRI system
E. Diaz-Caballero\textsuperscript{1}, A. Rodriguez\textsuperscript{2}, D. Grau-Ruiz\textsuperscript{3}, J.P. Rigla\textsuperscript{2}, J.D. Martinez\textsuperscript{3}, H. Sanchez\textsuperscript{3}, J.M. Gonzalez\textsuperscript{3}, G. Puchalt\textsuperscript{3}, V.E. Boria\textsuperscript{2}, J.M. Benlloch\textsuperscript{3}; \textsuperscript{1}Research and development, Tesoro Imaging S.L., Alicante/SPAIN, \textsuperscript{2}Instituto de Telecomunicaciones y Aplicaciones Multimedia, Universitat Politècnica de Valencia, Valencia/SPAIN, \textsuperscript{3}Instituto de Instrumentación para Imagen Molecular (I3M), Universitat Politècnica de València, Valencia/SPAIN
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

High efficiency strength biplanar MRI gradient coil design based on fast combinatorial optimization
D. Grau-Ruiz\textsuperscript{1}, H. Sanchez\textsuperscript{1}, J.P. Rigla\textsuperscript{2}, E. Diaz-Caballero\textsuperscript{2}, J.M. Gonzalez\textsuperscript{1}, G. Puchalt\textsuperscript{1}, J.M. Benlloch\textsuperscript{1}; \textsuperscript{1}Instituto de Instrumentación para Imagen Molecular (I3M), Universitat Politècnica de València, Valencia/SPAIN, \textsuperscript{2}Research and development, Tesoro Imaging S.L., Alicante/SPAIN
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Static magnetic field exposure extrapolation from trunk to head
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20
An EM simulation based design flow for custom-built MR coils incorporating signal and noise
A. Horneff¹, M. Eder¹, E. Heil², J. Ulrici³, J. Anders⁴, V. Rasche⁴; ¹Experimental Cardiovascular Imaging, Ulm University, Ulm/GERMANY, ²GM, Dentsply Sirona, Bensheim/GERMANY, ³GME, Dentsply Sirona, Bensheim/GERMANY, ⁴Institute of Microelectronics, Ulm University, Ulm/GERMANY

MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Finite Difference Transmission Line model for the design of safe multi-sections cables in MRI.
A. Missoffe; IADI, INSERM U947, IADI, INSERM U947, Vandoeuvre Cedex/FRANCE

MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Dual-birdcage Coil Arranged to Z-axis Direction using The Capacitive Decoupling Method for Multiple-mouse Imaging (MM-MRI) at 7 Tesla
P. Heo, D. Kim, S.-D. Han, H.-J. Kim, H. Song, K.-N. Kim; Gachon Advanced Institute for health Sciences and Technology, Gachon University, Incheon/KOREA, REPUBLIC OF

MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 14:50-15:20

Theoretical quality factor of a cyclic metamaterial antenna
F. Vazquez¹, R. Martin¹, S. Solís¹, O. Marrufo², A. Rodriguez³; ¹Department of Physics, Faculty of Sciences, UNAM, Mexico City/MEXICO, ²Department of Neuroimage, INNN MVS, Mexico City/MEXICO, ³Department of Electrical Engineering, UAM Iztapalapa, Mexico City/MEXICO

MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 20, 14:50-15:20

A novel metamaterial-inspired dual-nuclei radiofrequency coil for small animal imaging at 7 Tesla
A.A. Hurshkainen¹, A.V. Nikulin¹, E. Georget², B. Larrat², A.L. Neves³, P. Saboroux⁴, S. Enoch⁵, I.V. Melchakova¹, P.A. Belov¹, S.B. Glybovski¹, R. Abeddâim⁵; ¹Department of Nanophotonics and Metamaterials, ITMO University, Saint-Petersburg/ RUSSIAN FEDERATION, ²DRF/12BM/Neurospin/UNIRS, CEA-Saclay, Paris/FRANCE, ³CNRS, Institute Fresnel, Aix-Marseille University, Marseille Cedex/FRANCE

MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 20, 14:50-15:20

Design of an Egyptian axe dipole antenna for 7T MRI
I. Zivkovic, A. Webb; Department of Radiology, C. J. Gorter Center for High Field MRI, Leiden/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 20, 14:50-15:20

Extracellular volume measured by cardiac magnetic resonance imaging in the early stage of cardiac transplant: comparison to endomyocardial biopsy
D. Beitzke¹, A. Wielandner¹, A. Zuckermann², J. Riebandt², K. Uyanik-Ünal², C. Loewe¹, F. Wittmann²; ¹Biomedical Imaging and Image guided Therapy, Medical University Vienna, Vienna/AUSTRIA, ²Cardiac Surgery, Medical University Vienna, Vienna/AUSTRIA
295 15:50 Distribution of left ventricular trabeculation across gender and age: normal values in a cohort of 140 healthy subjects

Z. Bentatou¹, M. Finas², P. Habert³, S. Rapacchi¹, M. Guye¹, S. Bricq⁴, A. Lalande⁵, J. Frandon¹, J.-N. Dasher⁶, B. Dubourg⁶, G. Habib³, J. Caudron⁶, F. Kober¹, M. Bernard¹, A. Jacquier¹; ¹Marseille, Aix-Marseille Univ, CNRS, CRMBM, Marseille/FRANCE, ²Grenoble, University Hospital of Grenoble, Grenoble/FRANCE, ³Marseille, University Hospital La Timone, Marseille/FRANCE, ⁴Bourgogne, Univ. Bourgogne Franche-Comté, Bourgogne/FRANCE, ⁵Laboratoire Electronique Informatique et Image, Université de Bourgogne, Dijon/FRANCE, ⁶Rouen, University Hospital of Rouen, Rouen/FRANCE

296 WITHDRAWN

297 16:00 OPTIMAL REPETITION TIME FOR MYOCARDIAL ARTERIAL SPIN LABELING IN HUMANS

V. Aramendía-Vidaurreta, A. García-Osés, G. Bastarrika, M. Fernández-Seara; Radiology, Clínica Universidad de Navarra (CUN), Pamplona, Navarra/SPAIN

298 16:10 Respiratory variation in left ventricular cardiac function with 3D double golden-angle whole-heart cine imaging

K. Holst, M. Ugander, A. Sigfridsson; Department of Clinical Physiology, Karolinska Institutet and Karolinska University Hospital, Stockholm/SWEDEN

299 16:20 Hybrid cardiac PET MR for the evaluation of myocardial scarring in ischemic cardiomyopathy: intraindividual comparison of left ventricular scar burden evaluated by simultaneous PET and MR

D. Beitzke¹, C. Loewe¹, A. Wielandner¹, D. Senn¹, M.E. Stelzmüller², M. Lassen¹, S. Rasul¹, V. Pichler¹, M. Hacker¹; ¹Biomedical Imaging and Image guided Therapy, Medical University Vienna, Vienna/AUSTRIA, ²Cardiac Surgery, Medical University Vienna, Vienna/AUSTRIA

300 16:30 Myocardial fractional blood volume estimation using ultra low dose ferumoxytol enhanced MRI and three-compartment model of water exchange in patients with chronic kidney disease

D. Black¹, S. Stoumpos¹, M. Jerosch-Herold², P. Gatehouse³, G. Jayasekera¹, D. Kingsmore¹, C. Berry¹, P. Mark¹, G. Roditi¹, A. Radjenovic¹; ¹Institute of Cardiovascular & Medical Sciences, University of Glasgow, UK, Glasgow/UNITED KINGDOM, ²Radiology, Harvard Medical School, Boston/UNITED STATES OF AMERICA, ³National Heart & Lung Institute, Imperial College, London/UNITED KINGDOM
15:40–17:10  **38 Career Session**

Moderator: R. Achten, Ghent/BE

**How Not to Write a Paper**
15:40  P.J. Cozzone, Marseille/FR & Singapore/SGP
16:00  A. Trabesinger, Zurich/CH

**Roundtable Discussion about Career Options outside Academia you should consider**
16:20  Panelists:
- P.J. Cozzone, Marseille/FR & Singapore/SGP
- A. Trabesinger, Zurich/CH
- A. Filippone, Bracco
- J. Voirom, Bruker
- M. Goyen, GE Healthcare
- X. Golay, Gold Standard Phantoms
- P. Murphy, GSK
- P. Luijten, Philips Medical Systems
- I. Vallines, Siemens Healthineers
- W. de Graaf, Toshiba

15:40–17:10  **39 Scientific Session**

**Image Pulse Sequences and Techniques II**
Moderators: E.M. Larsson, Uppsala/SE
          F. Schick, Tübingen/DE

**301 15:40**  **Triple Quantum Filtering in in vivo Animal Sodium MRI Using Strongly Modulated Pulses**  

**302 15:50**  **Simultaneous Multi-Slice (SMS) cardiac T1 mapping at 3T using SMS-FLASH-MOLLI**  
S. Rapacchi¹, T. Troalen¹, Z. Bentatou¹, M. Guye¹, M. Bernard¹, A. Jacquier¹, F. Kober¹; ¹CRMBM/CEMEREM UMR 7339, Aix Marseille University CNRS, Marseille/FRANCE, ²S A S, Siemens Healthcare, Saint Denis/FRANCE

**303 16:00**  **HYFI: Hybrid filling for improved scan efficiency in zero echo time imaging with large dead-time gaps**  
R. Froidevaux, M. Weiger, K.P. Pruessmann; Institute for Biomedical Engineering, University and ETH Zurich, Zurich/SWITZERLAND

**304 16:10**  **MRI phase control with Optimal Control Theory**  
P.M. Lefebvre¹, K. Tse Ve Koon¹, H. Ratiney¹, D. Grenier¹, S.A. Lambert¹, E. Brusseau¹, D. Sugny², S.J. Glaser³, O. Beuf¹, E. Van Reeth¹; ¹CREATIS, Univ. Lyon; CNRS UMR 5220; INSERM U1206; INSA-Lyon; UJM-Saint Etienne; Université Lyon1, Villeurbanne/FRANCE, ²ICB, UMR 6303 CNRS-Université de Bourgogne, Dijon/FRANCE, ³Department of Chemistry, Technische Universität München, Garching/GERMANY
305 16:20  2D In-plane Flow MRI in Real Time
J.M. Kollmeier1, A.A. Joseph, D. Voit, Z. Tan, K.-D. Merboldt, J. Frahm; Biomedizinische NMR Forschungs GmbH, Max-Planck-Institut für biophysikalische Chemie, Göttingen/GERMANY

306 16:30  Simultaneous Multi-Contrast (SMC) Imaging for Synchronous DWI and T2*-Weighting
N.-J. Breutigam1, R. Frost2, K. Eickel1, D. Porter1; 1MR Physics, Fraunhofer MEVIS, Bremen/GERMANY, 2Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Boston/UNITED STATES OF AMERICA

307 16:40  MP2RAGEME: T1, T2* and QSM mapping in one sequence at 7 Tesla
M.W.a. Caan1, P.L. Bazin2, A. Fracasso2, S. Dumoulin2, J.P. Marques3, W. Van Der Zwaag2; 1Radiology, Academic Medical Center, Amsterdam/NETHERLANDS, 2Spinoza Centre for Neuroimaging, KNAW, Amsterdam/NETHERLANDS, 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen/NETHERLANDS

308 16:50  Self-Adapting Dynamic Temporal Resolution for Optimized Reconstruction of Free-Breathing Radial Real-Time MRI
F. Friedrich, S. Flassbeck, N.G..R. Behl, P. Bachert, M.E. Ladd, F. Maier; Medical Physics in Radiology, German Cancer Research Center (DKFZ), Heidelberg/GERMANY

309 17:00  Single-shot Myocardial T1 Mapping Within 3 Seconds
X. Wang, A. Joseph, O. Kalentev, K.-D. Merboldt, D. Voit, V. Roeloffs, M. Van Zalk, J. Frahm; Max Planck Institute for Biophysical Chemistry, NMR I, Goettingen/GERMANY

15:40–17:10  40 Scientific Session
Gradients and Detectors
Moderators: I. Zivkovic, Leiden/NL
R. Bowtell, Nottingham/UK

310 15:40  A high-performance head and extremity insert gradient for rapid and short-T2 imaging: 200 mT/m, 1200 mT/ms, and 100% duty cycle
YM. Weiger1, J. Overweg2, M.B. Rösler1, R. Froidevaux1, F. Hennel1, B.J. Wilm1, A. Penn1, U. Sturzenegger3, W. Schuth4, M. Mathlener4, M. Borgo4, P. Boernert2, C. Leussler2, R. Luechinger1, B.E. Dietrich1, J. Reber1, D.O. Brunner1, T. Schmid1, L. Vionnet1, K.P. Pruessmann1; 1Institute for Biomedical Engineering, University and ETH Zurich, Zurich/SWITZERLAND, 2Innovative Technologies, Philips GmbH, Hamburg/GERMANY, 3-, Philips AG, Zurich/SWITZERLAND, 4-, Futura Composites BV, Heerhugowaard/NETHERLANDS
311 15:50 A 3+4-channel $^{13}$C/1H transceiver coil array for proton decoupled carbon-13 MRS in the human calf muscles at 7 T
R. Frass-Kriegl¹, S. Goluch², M. Pichler¹, J. Sieg¹, M. Gajdosik², M. Meyerspeer¹, M. Krssak², E. Laistler¹; ¹Division MR Physics, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna/AUSTRIA, ²Division of Endocrinology and Metabolism, Department of Medicine III, Medical University of Vienna, Vienna/AUSTRIA

312 16:00 Evaluation of experimental MRI-SPECT insert system with hybrid semiconductor detectors Timepix tested by $^{1}$H/$^{99}$mTc phantom in MR animal scanner Bruker 47/20
J. Zajiček¹, M. Burian², J. Ters³; ¹Institute of Experimental and Applied Physics, Czech Technical University in Prague, Prague/CZECH REPUBLIC, ²Experimental Magnetic Resonance Unit, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, ³Nuclear Medicine, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC

313 16:10 Combined Surface Loop/ “Vertical” Loop Elements Improve Receive Performance of a Human Head Transceiver Phased Array at 9.4T: an Alternative to Surface Loop/ Dipole Antenna Combination.
N. Avdievich¹, I. Giapitzakis², A. Henning³; ¹Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY, ²High Field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY

314 16:20 An optical-based active detuning for single and dual channel/loop endoluminal surface coils
I. Saniour¹, A.-L. Perrier², L. Duvillaret³, R. Sablong¹, G. Gaborit², O. Beuf¹; ¹CREATIS, Univ. Lyon ; CNRS UMR 5220 ; INSERM U1206 ; INSA-Lyon ; UJM-Saint Etienne ; Université Lyon1, Villeurbanne/France, ²IMEP-LAHC, Univ. Savoie-Mont-Blanc, Le Bourget-Du-Lac/France, ³kapteos, Kapteos, Sainte-Hélène-Du-Lac/France

315 16:30 A Flexible Transceiver Array for 7 T Cardiac MRI: First Imaging Experiments
S. Hosseinnezhadian¹, R. Frass-Kriegl¹, S. Goluch¹, M. Pichler¹, J. Sieg¹, M. Poirier-Quinot², L. Darrasse², E. Moser¹, J.-C. Ginéfrí², E. Laistler¹; ¹Division MR Physics - Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna/AUSTRIA, ²IR4M (Imagerie par Résonance Magnétique Médicale et Multi-modalités), Univ. Paris-Sud, CNRS, UMR8081, Université Paris-Saclay, Orsay/France

316 16:40 Design of a Degenerate Birdcage Radiofrequency Transmit Array Coil for the Magnetic Resonance Imaging Using Equivalent Circuit Model
A. Sadeghi Tarakameh, E. Kazemivalipour, T. Demir, U. Gundogdu, E. Atalar; National Magnetic Resonance Research Center (UMRAM), Bilkent university, Ankara/TURKEY

317 16:50 On the ultimate shimming performance in the human brain
F. Jia¹, S. Kroboth¹, Y.-H. Chu¹, S. Littin¹, H. Yu¹, K. Scheffler², M. Zaitsev¹; ¹University Medical Center University of Freiburg, Faculty of Medicine, University of Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY, ²MRC Department, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY

318 17:00 Gradient impulse response measurements for a preclinical PET insert
N. Gross-Weege¹, T. Nolte², P. Gebhardt¹, V. Schulz¹; ¹Physics of Molecular Imaging Systems, Experimental Molecular Imaging, RWTH Aachen University, Aachen/GERMANY, ²Multiphysics & Optics, Philips Research Eindhoven, Eindhoven/NETHERLANDS
15:40–17:10  41 Scientific Session

Brain Tumours & Psychiatric Disease
Moderators: M. Smits, Rotterdam/NL
           M. Juilià-Sapé, Barcelona/ES

319  15:40  Is the geometrical accuracy of 7T MR images warranted for high-precision radiotherapy of brain tumours? - A comparison with 3T MR images
J. Peerlings¹, L. Compter¹, F. Janssen¹, C. Wiggins², A. Postma³, F. Mottaghy³, P. Lambin¹, A. Hoffmann¹; ¹Department of Radiation Oncology, MAASTRO clinic, Maastricht/NETHERLANDS, ²BV, Scannexus, Maastricht/NETHERLANDS, ³Department of Radiology and Nuclear Medicine, Maastricht University Medical Center+, Maastricht/NETHERLANDS

320  15:50  Multi-parametric physiology mapping of non-enhancing gliomas in humans
E.A. Warnert¹, F. Incelkara¹, M. Van Den Bent², A. Vincent³, C. Dirven³, T. Wood⁴, G.J. Barker⁴, J.A. Hernandez-Tamames¹, M. Smits¹; ¹Department of Radiology & Nuclear Medicine, Erasmus University Medical Center, Rotterdam/NETHERLANDS, ²Department of Neuro-Oncology, Daniel Den Hoed Cancer Center, Rotterdam/NETHERLANDS, ³Department of Neurosurgery, Erasmus University Medical Center, Rotterdam/NETHERLANDS, ⁴Center for Neuroimaging Science, King's College London, London/UNITED KINGDOM

321  16:00  A High Resolution Gradient-Echo/Spin-Echo EPI Sequence for Vessel Architecture Imaging
K. Zhang¹, S.D. Yun², V. Sturm³, S.m.f. Triphan⁴, L.R. Buschle³, A. Hahn³, S. Heiland³, M. Bendszus³, H.-P. Schlemmer¹, C. Ziener¹, F. Kurz¹; ¹E010 Radiology, German Cancer Research Center, Heidelberg/GERMANY, ²Jülich Research Centre, Institute of Neuroscience and Medicine - 4, Jülich/GERMANY, ³Neuroradiology, University Hospital Heidelberg, Heidelberg/GERMANY, ⁴Diagnostic Radiology, University Hospital Heidelberg, Heidelberg/GERMANY

322  16:10  Glioma Invasion, Defined by the Perivenous Space
D. Schomer¹, J. Johnson¹, A. Hayman²; ¹Radiology, UT MD Anderson Cancer Center, Houston, Tx/UNITED STATES OF AMERICA, ²Science, Anatom-e Inc, Houston Texas/UNITED STATES OF AMERICA

323  WITHDRAWN

324  16:20  Molecular characterization of glioma in a multimodal MR study
U. Klose¹, J.-M. Hempel¹, C. Brendle¹, S. Bisdas², J. Schittenhelm³, M. Skardelly⁴, U. Ernemann¹; ¹Diagnostic and Interventional Neuroradiology, University Hospital Tübingen, Tübingen/GERMANY, ²Neuroimaging Analysis Centre, UCL Institute of Neurology, London/UNITED KINGDOM, ³Neuropathology, University Hospital Tübingen, Tübingen/GERMANY, ⁴Neurosurgery, University Hospital Tübingen, Tübingen/GERMANY
325 16:30 Detecting of Glioblastoma Invasion Cells Using Multiparametric MRI and Quantitative Assessment with in-plane Histology
H. Al-Mubarak1, A. Vallatos2, J. Birch3, L. Gilmour3, L. Gallagher1, J. Mullin1, A. Chalmers3, W. Holemes1; 1institute of neuroscience and psychology, University of Glasgow, Glasgow/UNITED KINGDOM, 2University of Glasgow, University of Glasgow, Glasgow/UNITED KINGDOM, 3Institute of Cancer Sciences, University of Glasgow, Glasgow/UNITED KINGDOM

326 16:40 Protein Mass Spectrometry analysis to help in interpreting T1-dispersion curves of FFC-NMR: applications in human cerebral tumours
L. Broche1, S. Pierre2, M. Court2, F. Berger2, P. Fries3, H. Lahrech2; 1ABIC, University of Aberdeen, Aberdeen/UNITED KINGDOM, 2U1205, INSERM, Grenoble/FRANCE, 3INAC, CEA, Grenoble/FRANCE

327 16:50 Neuromelanin Imaging of the Substantia Nigra in First Episode Psychosis - Influence of Psychotropic Drugs Consumption
M. Tavares1, S. Reimão2, I. Chendo3, M. Carvalho1, P. Levy3, M. Cavusoglu4; 1Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Lisbon/PORTUGAL, 2Neurological Imaging Department, Hospital de Santa Maria- Centro Hospitalar Lisboa Norte, Lisbon/PORTUGAL, 3Psychiatry Department, Hospital de Santa Maria-Centro Hospitalar Lisboa Norte, Lisbon/PORTUGAL, 4Institute for Systems and Robotics and Department of Bioengineering, Instituto Superior Técnico, Lisbon/PORTUGAL

15:40–16:40 42 Lightning Talks Room 3
Quantification and Post-Processing
Moderators: H. Mesri, Utrecht/NL
H. Mutsaerts, Utrecht/NL

328 15:40 A Weighted Least Squares Approach to Reduce T1 Estimation Bias in DESPOT1
S.-F. Shih, H.-W. Chung; Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University, Taipei/TAIWAN
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

329 15:42 Performance Comparison of T1-mapping MOLLI Sequence Fitting Algorithms
A.S. Gaspar, R.G. Nunes; Institute for Systems and Robotics / Department of Bioengineering, Instituto Superior Técnico, Lisbon/PORTUGAL
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 20, 16:40-17:10

330 15:44 T1 mapping with the variable flip angle technique: a simple correction for insufficient spoiling of transverse magnetization
S. Baudrexel1, R. Deichmann2; 1Dept. of Neurology, University Hospital Frankfurt, Frankfurt/main/GERMANY, 2Brain Imaging Center, University Frankfurt, Frankfurt/main/ GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 20, 16:40-17:10
WITHDRAWN

331 15:46 R1, R2 and B1 mapping with an inhomogeneous T/R coil by QuICS
G. Guillot¹, L. Jourdain¹, N. Chanet¹, R.-M. Dubuisson¹, M. Poirier-Quinot¹, L. De Rochefort²; ¹IR4M (Imagerie par Résonance Magnétique Médicale et Multi-modalités), Univ. Paris-Sud, CNRS, UMR8081, Université Paris-Saclay, Orsay/FRANCE, ²CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

332 15:48 T1 mapping of the patellar tendon using a multi flip-angle 3D-UTE acquisition.
P. Baron, S. Breda, D.H.J. Poot, E.H.G. Oei, J.A. Hernandez-Tamames; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

333 15:50 3D UTE T2* mapping of the patellar tendon; dependence on fat saturation and fitting model.
P. Baron, S. Breda, D.H.J. Poot, E.H.G. Oei, J.A. Hernandez-Tamames; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 20, 16:40-17:10

334 15:52 Accuracy of ADC measurements with an Ultrashort Echo Time Diffusion Weighted stimulated echo 3D Cones sequence (DW-STEAM 3D Cones UTE)
P. Baron, D.H.J. Poot, P.A. Wielopolski, E.H.G. Oei, J.A. Hernandez-Tamames; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 20, 16:40-17:10

335 15:54 Water content, diffusion measures (DTI/DKI) and FET-PET in brain tumours: investigating similarities and differences
A.-M. Oros-Peusquens¹, R. Loucao¹, H. Ferreira², K.-J. Langen¹, N.J. Shah¹; ¹Institute of Neuroscience and Medicine – 4, Forschungszentrum Jülich GmbH, Jülich/GERMANY, ²Instituto de Biofísica e Engenharia Biomédica, 2Instituto de Biofísica e EngSciences Faculty of University of Lisbon, Lisbon/PORTUGAL
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 20, 16:40-17:10

336 15:56 Quantitative Susceptibility Mapping (QSM) challenge follow-up: analysis of susceptibility ground-truth and quality metrics
C. Milovic¹, B. Bilgic², C. Langkammer³, J. Acosta-Cabronero⁴, C. Tejos⁵; ¹Biomedical Imaging Center, Pontificia Universidad Catolica de Chile, Santiago/CHILE, ²radiology, mgh, Boston/UNITED STATES OF AMERICA, ³Department of Neurology, Medical University of Graz, Graz/AUSTRIA, ⁴Wellcome Trust Centre for Neuroimaging, University College London, London/UNITED KINGDOM, ⁵Department of Electrical Engineering, Pontificia Universidad Catolica de Chile, Santiago/CHILE
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10
Quantitative Susceptibility Mapping of Blood Vessel Networks
L.R. Buschle¹, F. Kurz², H.-P. Schlemmer¹, C. Ziener¹; ¹E010 Radiology, German Cancer Research Center, Heidelberg/GERMANY, ²Neuroradiology, University Hospital Heidelberg, Heidelberg/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 20, 16:40-17:10

Linear Correction of Quantitative in vivo T2-Maps Acquired with Fast Spin Echo Techniques
U. Noeth¹, M. Shrestha¹, J.-R. Schuere², R. Deichmann¹; ¹Brain Imaging Center (BIC), Goethe University Frankfurt, Frankfurt/main/GERMANY, ²Department of Neuroradiology, University Hospital Frankfurt, Frankfurt/main/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 20, 16:40-17:10

Statistically optimal separation of multi-component MR signals with a Majorize-Minimize approach: application to MWF estimation
G. Ramos-Llordén¹, A.J. Den Dekker¹, P. Bladt², A. Cuyt², J. Sijbers¹; ¹Department of Physics, University of Antwerp, Antwerp/BELGIUM, ²Department of Mathematics-Computer Science, University of Antwerp, Antwerp/BELGIUM
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

Uncertainty on the Cramér-Rao bound : What are the consequences in quantitative NMR ?
J.-M. Bonny, G. Pagès; AgroResonance – UR370 Qualité des Produits Animaux, INRA, Saint-Genès Champanelle/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 20, 16:40-17:10

Towards Magnetic Resonance Fingerprinting for Simultaneous Water-Fat Quantification
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

WITHDRAWN

Magnetization Transfer in Brain: Comparison to Relaxation and Proton Density
T. Watanabe, X. Wang, Z. Tan, J. Frahm; Biomedizinische NMR Forschungs GmbH, Max-Planck-Institut für biophysikalische Chemie, Göttingen/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 20, 16:40-17:10

Anisotropic Conductivity Imaging Using Electrical Properties Tomography at 3T-MRI
Y. Kaneko¹, B. Thapa², K. Jeong², D. Cross¹, E.-K. Jeong², S. Minoshima¹; ¹Department of Radiology and Imaging Sciences, University of Utah, Salt Lake City/UNITED STATES OF AMERICA, ²Utah Center for Advanced Imaging Research, University of Utah, Salt Lake City/UNITED STATES OF AMERICA
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10
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<tr>
<td>346</td>
<td>16:14</td>
<td>Artefacts in phaseless super-resolution MRI – a simulation study</td>
<td>R. Tian, F. Hennel, K.P. Pruessmann; Institute for Biomedical Engineering, University of Zurich and ETH Zurich, Zurich/SWITZERLAND</td>
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<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10</td>
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<td>347</td>
<td>16:16</td>
<td>Sparse Image Reconstruction of Multicontrast MRI-data using multiple sets of Principal Components</td>
<td>M. Grosser, T. Knopp; Section for Biomedical Imaging, University Medical Center Hamburg-Eppendorf, Hamburg/GERMANY</td>
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<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10</td>
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<tr>
<td>348</td>
<td>16:18</td>
<td>Compressively sampled l1/2-regularization for Image Reconstruction in MRI</td>
<td>M. Qureshi, O. Inam, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN</td>
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<td>MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 20, 16:40-17:10</td>
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<td>349</td>
<td>16:20</td>
<td>A new multispectral nonlocal maximum likelihood filter for effective denoising of MR imaging data</td>
<td>J.-M. Bonny¹, M. Bouhrara², R.G. Spencer²; ‘AgroResonance – UR370 Qualité des Produits Animaux, INRA, Saint-Genès Champanelle/FRANCE, ²Laboratory of Clinical Investigation, National Institute on Aging, NIH, Baltimore/UNITED STATES OF AMERICA</td>
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<td>350</td>
<td>16:22</td>
<td>Beyond high resolution: Noise filtering of 250 µm T1-weighted in vivo human whole brain data to improve image quality</td>
<td>F. Lüsebrink¹, O. Speck¹, O. Speck², O. Speck³, O. Speck⁴; ‘Biomedical Magnetic Resonance, Otto-von-Guericke-Universität Magdeburg, Magdeburg/GERMANY, ²Leibnitz Institute for Neurobiology, Leibnitz Institute for Neurobiology, Magdeburg/GERMANY, ³Center for Behavioral Brain Sciences, Center for Behavioral Brain Sciences, Magdeburg/GERMANY, ⁴German Center for Neurodegenerative Diseases (DZNE), German Center for Neurodegenerative Diseases (DZNE), Magdeburg/GERMANY</td>
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<td>351</td>
<td>16:24</td>
<td>A pipeline to standardize intensities of MR images for reliable longitudinal studies in neuro-oncology.</td>
<td>J. Goya Outi¹; R. Calmon², A. Alentorn³, C. Philippe³, F. Orlhac¹, C. Nioche¹, J. Grill⁴, V. Frouin³, F. Frouin¹; ‘IMIV, INSERM/CEA/CNRS/Université Paris-Sud/Université Paris-Saclay, Orsay/FRANCE, ²Radiologie, AP-HP, Paris/FRANCE, ³Neurospin/DRF, CEA, Gif-Sur-Yvette/FRANCE, ⁴CNRS UMR 8203, Gustave-Roussy, Villejuif/FRANCE</td>
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<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10</td>
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352 16:26 Importance of optimal T2 weighting in MRI for automated intervertebral disc segmentation
A. Chodorowski1, H. Hebelka2, K. Lagerstrand3, H. Brisby4; 1Electrical Engineering, Signals and Systems, Chalmers University of Technology, Gothenburg/SWEDEN, 2Department of Radiology, Sahlgrenska University Hospital, Institute of Clinical Sciences, Sahlgrenska Academy, Gothenburg/SWEDEN, 3Department of Medical Physics and Technology, Sahlgrenska University Hospital, Gothenburg/SWEDEN, 4Dept of Orthopaedics, Sahlgrenska University Hospital, Gothenburg/SWEDEN
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

353 16:28 Feasibility of multireference tissue normalization of T2-weighted prostate MRI.
L. Stoilescu1, M. Maas1, H. Huisman1; 1Radiology, Radboudumc, Nijmegen/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 20, 16:40-17:10

354 16:30 Benefits of a collaborative work in the evaluation of prostate cancer from MRI
C. Mata1, P.M. Walker2, A. Lalande2, J. Martí2, A. Oliver2; 1Centre for Technological Risk Studies, Polytechnic University of Catalonia, Barcelona/SPAIN, 2Laboratoire Electronique Informatique et Image, Université de Bourgogne, Dijon/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 20, 16:40-17:10

355 16:32 The Mahalanobis-distance: a tool for epileptic lesion detection using DTI data
G. Gyebnár1, Z. Klimaj1, L. Entz2, D. Fabó2, G. Rudas1, P. Barsi1, L.R. Kozák1; 1MR Research Centre, Semmelweis University, Budapest/HUNGARY, 2Department of Functional Neurosurgery, National Institution of Clinical Neurosciences, Budapest/HUNGARY
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

356 16:34 Optimization and performance testing of diffeomorphic atlas registration in MR microscopy data to quantify hippocampus volumes of transgenic TDP-43 mouse models.
S. Wang1, A. Van Hummel2, Y. Ke2, L. Ittner2, A. Bongers3; 1Faculty of Medicine, The University of New South Wales, Sydney, Sydney/AUSTRALIA, 2School of Medical Sciences, The University of New South Wales, Sydney, Sydney/AUSTRALIA, 3Mark Waiwright Analytical Centre, The University of New South Wales, Sydney, Sydney/AUSTRALIA
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10

357 16:36 Quantification of Human Left Atrial Myocardial Fibrosis and Adipose Tissue from MRI
MEET THE AUTHOR in the Paper Poster Area on Oct. 20, 16:40-17:10
### Hot Topic Debate

**Quantitative Relaxation Time Measurement: Boom or Bust?**

**Moderator:** M. Smits, Rotterdam/NL

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<td>P. A. Rinck</td>
<td>EMRF/TRTF, Mougins/FRANCE</td>
<td>France</td>
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<tr>
<td><strong>Proponent</strong></td>
<td>S. Trattnig</td>
<td>Medical University of Vienna</td>
<td>Austria</td>
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### Scientific Programme

**SATURDAY, OCTOBER 21, 2017**

<table>
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<tr>
<th>Time</th>
<th>44 Teaching Session - Advanced</th>
<th>Auditorium / Room 7</th>
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<tr>
<td>08:00–09:00</td>
<td>CEST and Relaxation Enhanced MRI</td>
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<td>Moderators: B. Gomez-Anson, Barcelona/ES</td>
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<td>F.B. Pizzini, Verona/IT</td>
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<tr>
<td>358 08:00</td>
<td>CEST imaging: what is it and what is it for?</td>
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<td></td>
<td>P. Van Zijl; F.M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Johns Hopkins University school of Medicine, Baltimore/UNITED STATES OF AMERICA</td>
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<tr>
<td>359 08:30</td>
<td>Relaxation enhanced MRI: principle and applications</td>
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<td>P. Jakob; Experimental Physics 5, University of Würzburg, Würzburg/GERMANY</td>
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<tr>
<td>08:00–09:00</td>
<td>Room 6</td>
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<tr>
<td></td>
<td>Image Registration and Segmentation Algorithms</td>
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<td>Moderators: M. Noseworthy, Hamilton/CA</td>
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<td>M. Zhao, Oxford/UK</td>
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<td>360 08:00</td>
<td>Getting images in the right place: registration algorithms - challenges and pitfalls</td>
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<td>S. Heldmann; Institute for Medical Image Computing, Fraunhofer MEVIS, Lübeck/GERMANY</td>
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<tr>
<td>361 08:30</td>
<td>Information extraction: segmentation of medical images</td>
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<td>H. Huisman; radiology, radboudumc, Nijmegen/NETHERLANDS</td>
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<th>Time</th>
<th>46 Teaching Session - Advanced</th>
<th>Room 5</th>
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<tr>
<td>08:00–09:00</td>
<td>MRI Perfusion in Brain Lesions: Tips and Pitfalls</td>
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<td></td>
<td>Moderators: H. Mutsaerts, Utrecht/NL</td>
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<td>L. Vaclavu, Amsterdam/NL</td>
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<td>362 08:00</td>
<td>MRI perfusion imaging: technical tips and pitfalls</td>
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<td>M. Van Osch; C.J. Gorter Center for high field MRI, department of Radiology, LUMC, Leiden/NETHERLANDS</td>
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<tr>
<td>363 08:30</td>
<td>MRI perfusion in brain lesions: clinical tips and pitfall</td>
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<td></td>
<td>R. Achten; Radiology, Ghent University, Gent/BELGIUM</td>
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</table>
09:15–10:30 47 Plenary Session
MRI for Neuroscience
Moderators: X. Golay, London/UK
M. Smits, Rotterdam/NL

364 09:15 The physicist's goal: Bridging temporal and spatial scales
K. Miller; FMRIB centre, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford/UNITED KINGDOM

365 09:40 The connectomist's goal: bridging the gap between structure and function
M. Thiebaut De Schotten; Brain Connectivity and Behaviour Group, Sorbonne Universities, Paris/FRANCE

366 10:05 The neuropsychologist's goal: Applying connectomics to clinical populations
Y. Reijmer; Neurology, Brain Center Rudolf Magnus, University Medical Center Utrecht, Utrecht/NETHERLANDS

10:50–12:20 48 Teaching Session - Advanced
MRI Simuations: Techniques and Tools
Moderators: S. Kozerke, Zurich/CH
F. Hennel, Zurich/CH

367 10:50 The ingredients of realistic and efficient MRI simulations
T. Stöcker; MR Physics, DZNE, Bonn/GERMANY

368 11:20 Phase Graphs
J. Hennig; Department of Radiology, Medical Physics, Medical Center - University of Freiburg, Faculty of Medicine, University of Freiburg, Freiburg/GERMANY

369 11:50 Hardware-Independent Sequence Prototyping
M. Zaitsev; University Medical Center University of Freiburg, Faculty of Medicine, University of Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY

10:50–12:20 49 Teaching and Scientific Session
Breast and Chest - Clinical Applications
Moderators: S. Radjenovic, Leeds/UK
E. M. Fallenberg, Berlin/DE

10:50 Introduction
E. M. Fallenberg; Klinik für Radiologie, Charité Campus Virchow, Berlin/GERMANY

370 11:10 Assessing lactate concentration in breast cancer using multiple quantum coherence (MQC) magnetic resonance spectroscopy (MRS) method
S.M. Cheung¹, E. Husain², Y. Masanamat³, K. Wahle³, S. Heys⁴, J. He¹; ¹Aberdeen Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM, ²Pathology, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ³Pathology, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ⁴Strathclyde Institute of Pharmacy and Biological Sciences, University of Strathclyde, Glasgow/UNITED KINGDOM, ⁵School of Medicine, University of Aberdeen, Aberdeen/UNITED KINGDOM
371 11:20  Feasibility of metabolic imaging of hyperpolarized $^{13}$C-pyruvate in human breast cancer  
**M. Mclean**¹, C. Daniels², J. Grist², R. Schulte³, T. Lanz¹, A. Chhabra⁵, B. Basu¹, I. Wilkinson⁶, M. Graves², D. Lomas², H. Earl¹, C. Caldas¹, F. Gilbert², K. Brindle¹, F. Gallagher²; ¹Cancer Research UK Cambridge Institute, University of Cambridge, Cambridge/UNITED KINGDOM, ²Radiology, University of Cambridge, Cambridge/UNITED KINGDOM, ³Global Research, General Electric, Munich/Germany, ⁴Rapid Biomedical GmbH, Rapid, Rimpar/Germany, ⁵Pharmacy, Addenbrooke’s Hospital, Cambridge/UNITED KINGDOM, ⁶Experimental Medicine and Immunotherapeutics, Addenbrooke’s Hospital, Cambridge/UNITED KINGDOM, ⁷Oncology, Addenbrooke’s Hospital, Cambridge/UNITED KINGDOM

372 11:30  Assessment of the lipid composition in breast cancer using double quantum filtered (DQF) two dimensional correlation spectroscopy (COSY) and multiple quantum coherence (MQC) magnetic resonance spectroscopy (MRS)  
**S.M. Cheung**¹, E. Husain², Y. Masannat³, V. Mallikourtis¹, S. Heys⁴, J. He¹; ¹Aberdeen Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM, ²Pathology, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ³Breast Unit, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ⁴School of Medicine, University of Aberdeen, Aberdeen/UNITED KINGDOM

373 11:40  Evaluation of diffusion MRI q-space imaging (QSI) and restricted diffusion models for profiling whole human breast tumour microstructure  
**N. Senn**¹, Y. Masannat², E. Husain³, B. Siow⁴, S. Heys⁵, J. He¹; ¹Aberdeen Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM, ²Breast Unit, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ³Pathology, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ⁴MRI Unit, The Francis Crick Institute, London/UNITED KINGDOM, ⁵School of Medicine, University of Aberdeen, Aberdeen/UNITED KINGDOM

374 11:50  Application of multi-channel signal combination algorithms on the measurement of polyunsaturated fatty acids (PUFA) using multiple quantum coherence (MQC) magnetic resonance spectroscopy (MRS) in breast cancer  
**V. Mallikourtis**¹, S.M. Cheung¹, Y. Masannat², E. Husain³, S. Heys⁴, J. He¹; ¹Aberdeen Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM, ²Breast Unit, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ³Pathology, Aberdeen Royal Infirmary, Aberdeen/UNITED KINGDOM, ⁴School of Medicine, University of Aberdeen, Aberdeen/UNITED KINGDOM

375 12:00  Breast MRI and Contrast Enhanced Spectral Mammography in detection and size estimation of histologically proven breast cancers  
**S. Heinze**¹, E. Luczynska¹, S. Dyczek¹, J. Rys²; ¹Department of Radiology, Center of Oncology Maria Skłodowska-Curie Memorial Institute, Cracow/Poland, ²Department of Pathology, Center of Oncology Maria Skłodowska-Curie Memorial Institute, Cracow/Poland
10:50–12:20 50 Scientific Session
Motion, Artefacts and Quality Control
Moderators: C. Rossi, Zurich/CH
M. Graves, Cambridge/UK

376 12:10 UTE-SENCEFUL: High resolution functional lung imaging
L. Mendes Pereira, A., T. Wech, C. Kestler, S. Veldhoen, T. Bley, H. Köstler;
Department of Diagnostic and Interventional Radiology, University Hospital Würzburg, Würzburg/GERMANY

377 10:50 Retrospective Evaluation of Pilot Tone Based Cardiac Trigger Quality In A Volunteer Cohort
M. Bacher1, P. Speier2, J. Bollenbeck2, M. Fenchel2, R. Stollberger1; 1Institute of Medical Engineering, Graz University of Technology, Graz/AUSTRIA, 2DI MR, Siemens Healthineers, Erlangen/GERMANY

378 11:00 Comparison of gradient impulse response functions measured with a dynamic field camera and a phantom-based technique
N.N. Graedel1, S.A. Hurley2, S. Clare1, K. Miller1, K.P. Pruessmann3, S.J. Vannesjo1; 1FMRIB centre, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford/UNITED KINGDOM, 2Department of Radiology, University of Wisconsin, Wisconsin/UNITED STATES OF AMERICA, 3Institute for Biomedical Engineering, University of Zurich and ETH Zurich, Zurich/SWITZERLAND

379 11:10 Effectiveness of real-time feedback field control in T2* images of elderly & MCI subjects.
L. Vionnet1, J. Van Bergen2, Y. Duerst1, R.S. Meyer2, N. Fichtner1, M. Wyss1, P.G. Unschuld2, K.P. Pruessmann1; 1Dept. of Information Technology and Electrical Engineering, Institute for Biomedical Engineering, ETH & University of Zurich, Zurich/SWITZERLAND, 2Institute for Regenerative Medicine, University of Zurich, Schlieren/SWITZERLAND

380 11:20 Automated quality control of magnetic resonance spectra of brain tumors by Convex Non-negative Matrix Factorization
Y. Hernández Villegas1, V. Mocioiu2, D. Ulinic2, S.P.K. Kyathanahally3, A. Vellido4, C. Arús2, M. Julià-Sapé1; 1Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Centro de Investigación Biomédica en Red, Cerdanyola Del Vallès/SPAIN, 2Departament de Bioquímica i Biologia Molecular, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN, 3Depts. Radiology and Clinical Research, University of Bern, Bern/SWITZERLAND, 4Departamento de Ciencias de la Computación, Universidad Politècnica de Cataluña(UPC), Barcelona/SPAIN

381 11:30 Retrospective correction of breathing-induced B0 field fluctuations in the cervical spinal cord at 7T
S.J. Vannesjo, S. Clare, K. Miller, I. Tracey; FMRIB centre, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford/UNITED KINGDOM

382 11:40 Effect of Angular and Spacial Resolution on the Quantification of Diffusion Properties of the Optic Chiasm: Segmented EPI Readout DTI Optimization.
M. Piccirelli, A. Valavanis; Department of Neuroradiology, University Hospital Zurich, Zurich/SWITZERLAND
383 11:50  Time-Course Assessment of 3D MR Geometric Image Distortion for Stereotactic Radiosurgery  
A. Damyanovich, J.-P. Bissonnette, D. Jaffray; Medical Physics, Princess Margaret Cancer Center, Toronto/CANADA

384 12:00  A correction method for motion-induced misalignment in high b-value diffusion MRI  
C.-F. Huang, Y.-J. Chen, Y.-C. Hsu, W.-Y.I. Tseng; Institute of Medical Device and Image, National Taiwan University College of Medicine, Taipei/TAIWAN

385 12:10  Autofocus-based motion field optimisation for cardiac motion corrected 3D whole-heart MRI  
S. Dietrich¹, M.A. Ahlman², R. Evers², D.A. Bluemke², T. Schäffter¹, C. Kolbitsch¹; ¹(PTB), Physikalisch-Technische Bundesanstalt, Braunschweig And Berlin/GERMANY, ²Radiology and Imaging Sciences, National Institutes of Health, Clinical Center, Bethesda/UNITED STATES OF AMERICA

10:50–12:20 51 Spanish Experts Sessions

51 10:50  Evaluación por neuroimagen de la fase preclínica de la Enfermedad de Alzheimer  
J.D. Gispert; Fundació Pasqual Maragall, Barcelona/ES

51 11:20  RM en el seguimiento de la esclerosis múltiple  
A. Rovira; Radiology, Hospital Vall d’Hebrón, Barcelona/ES

51 11:50  Biomarcadores espectroscópicos para el diagnóstico de los tumores cerebrales  
C. Majós; Institut de Diagnòstic per la Imatge (IDI), Hospital de Bellvitge, L’hospitalet De Llobregat/ES
10:50–12:20  52 Lightning Talks
Perfusion and Molecular Imaging
Moderators:  L. Knutsson, Lund/SE
          C. Laustsen, Aarhus/DK

389  10:50  Simultaneous measurements of global cerebral blood flow changes with phase contrast mapping and $^{18}$O-H$_2$O PET in a hybrid PET/MR system.
O.P. Calvo¹, M.B. Vestergaard², U. Lindberg², E. Rostrup², A. Espe Hansen¹, H.B.W. Larsson², I. Law¹, O.M. Henriksen¹; ¹Dept. of Clinical Physiology, Nuclear Medicine and PET, Copenhagen University Hospital Rigshospitalet, Copenhagen/DENMARK, ²Functional Imaging Unit, Rigshospitalet Glostrup, Glostrup/DENMARK
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

390  10:52  WITHDRAWN

391  10:55  Self-controlled super-selective Arterial Spin Labeling
T. Lindner¹, F. Austein¹, O. Jansen¹, M. Helle²; ¹Department of Radiology and Neuroradiology, University Hospital Schleswig-Holstein, Kiel/GERMANY, ²Research, Philips, Hamburg/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 21, 11:50-12:20

392  10:57  Accelerated 3D-GRASE pCASL for multiple post labeling delay perfusion imaging
M. Boland, R. Stirnberg, T. Stoecker; DZNE, German Center for Neurodegenerative Diseases, Bonn/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 21, 11:50-12:20

393  10:59  Cerebral Perfusion Measurement of Brain Tumors Using Arterial Spin Labeling MRI Accelerated by Compressed Sensing
D.B. Arslan¹, G.H. Hatay¹, H. Cebeci², B. Hakyemez³, E. Ozturk Isik¹; ¹Institute of Biomedical Engineering, Bogazici University, Istanbul/TURKEY, ²Department of Radiology, Selcuk University, Konya/TURKEY, ³Department of Radiology, Uludag University, Bursa/TURKEY
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

394  11:00  Comparison of PVE correction methods for ASL perfusion MRI on a cohort of healthy subjects
I. Tsiachristos, S. Kaczmarz, J. Göttler, C. Preibisch; Neuroradiology Department, Klinikum Rechts der Isar der Technische Universität München, Munich/GERMANY
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

395  11:02  Comparison of two methods for atrophy-correction in perfusion imaging:
Partial-volume correction versus gray-matter volume covariate
J. Petr¹, H.J. Mutsaerts², F. Hofheinz¹, R.M. Steketee³, M. Smits³, A.J. Nederveen⁴, J. Van Den Hoff¹, I. Aslani⁵; ¹PET Center, Institute of radiopharmaceutical cancer research, Helmholtz-Zentrum Dresden-Rossendorf, Dresden/GERMANY, ²Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, ³Department of Radiology and Nuclear Medicine, Erasmus MC - University medical center Rotterdam, Rotterdam/NETHERLANDS, ⁴Department of Radiology, Academic Medical Center Amsterdam, Amsterdam/NETHERLANDS, ⁵Department of Biomedical Engineering, Rochester Institute of Technology, Rochester/UNITED STATES OF AMERICA
MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 21, 11:50-12:20
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<tr>
<td>11:04</td>
<td>Optimized FAIR-ASL temporal SNR using 2D/3D-EPI at 7 Tesla</td>
<td>L. Greco, O. Reynaud</td>
<td>CIBM, EPFL, Lausanne/SWITZERLAND</td>
<td>Paper Poster Area on Oct. 21, 11:50-12:20</td>
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<tr>
<td>11:08</td>
<td>Optimal experiment design of pseudo-continuous arterial spin labeling</td>
<td>P. Bladt*, A.J. Den Dekker, P. Clement, E. Achten, J. Sijbers</td>
<td>Department of Physics, University of Antwerp, Antwerpen/BELGIUM, Department of Radiology and nuclear medicine, University of Ghent, Gent/BELGIUM</td>
<td>Paper Poster Area on Oct. 21, 11:50-12:20</td>
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<tr>
<td>11:12</td>
<td>Effect of menstrual cycle phase and hormonal contraceptive use on</td>
<td>L. Vansteenkiste, P. Clement, P. Vandemaele, E. Achten</td>
<td>Department of Radiology and nuclear medicine, University of Ghent, Gent/BELGIUM</td>
<td>Paper Poster Area on Oct. 21, 11:50-12:20</td>
</tr>
</tbody>
</table>
Intraoperative perfusion imaging – Comparison between Arterial Spin Labeling and Dynamic Susceptibility Imaging

T. Lindner1, H. Ahmeti2, J. Juhasz1, M. Helle3, O. Jansen1, M. Synowitz2, S. Ulmer4; 1Department of Radiology and Neuroradiology, University Hospital Schleswig-Holstein, Kiel/GERMANY, 2Clinic for Neurosurgery, University Hospital Schleswig-Holstein, Kiel/GERMANY, 3Research, Philips, Hamburg/GERMANY, 4Radiologie, Medizinisch Radiologisches Institut, Zürich/SWITZERLAND

MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 21, 11:50-12:20

Atrial fibrillation may result in decreased local cerebral perfusion.

J. Tintera1, M. Blaha2, L. Sukupova1, J. Haskova2, D. Kautznerova1, A. Benak2, J. Kautzner2; 1ZRIR, IKEM, Prague/CZECH REPUBLIC, 2Cardiology, IKEM, Prague/CZECH REPUBLIC

MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 21, 11:50-12:20

DYNAMIC CONTRAST ENHANCED MRI TO CHARACTERIZE PLACENTAL HYPOPERFUSION IN A PREGNANT RABBIT MODEL

C. Schaaf1, C. Bertholdt2, M. Dap2, O. Morel2, M. Beaumont1; 1CIC-IT, CHRU de Nancy, Vandoeuvre-Les-Nancy/FRANCE, 2IADI, INSERM, Vandoeuvre-Les-Nancy/FRANCE

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

Estimating glomerular filtration rate of the kidney based on texture analysis of DCE-MRI images

A. Klepaczko1, P. Szczypiński1, E. Eikefjord2, J. Rørvik3, A. Lundervold4; 1Institute of Electronics, Lodz University of Technology, Lodz/POLAND, 2Department of Radiology, Haukeland University Hospital, Bergen/NORWAY, 3Department of Clinical Medicine, University of Bergen, Bergen/NORWAY, 4Department of Biomedicine, University of Bergen, Bergen/NORWAY

MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 21, 11:50-12:20

Water exchange in cerebral perfusion MRI: A Bayesian approach

C. Pirkl1, A. Mittermeier, M.J. Schneider, V.J. Schmid, B. Ertl-Wagner, K. Parodi, M. Ingrisch; 1Josef Lissner Laboratory for Biomedical Imaging, Institute for Clinical Radiology, Ludwig-Maximilians-University Hospital Munich, Munich/GERMANY, 2Department of Statistics, Ludwig-Maximilians-University Munich, Munich/GERMANY, 3Institute for Clinical Radiology, Ludwig-Maximilians-University Hospital, Munich/GERMANY, 4Department of Medical Physics, Ludwig-Maximilians-University, Garching/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 21, 11:50-12:20

Perfusion assessment of critical limb ischemia in rabbit model using dynamic contrast-enhanced magnetic resonance imaging


MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 21, 11:50-12:20
11:26 Isotropic diffusion weighted IVIM at 7T
I. Maximov¹, S. Vellmer², R. Stirnberg³, T. Stoecker³; ¹Experimental Physics III, TU Dortmund, Dortmund/Germany, ²Signal modulation, Bernstein Center for Computational Neuroscience, Berlin/Germany, ³DZNE, German Center for Neurodegenerative Diseases, Bonn/Germany
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 21, 11:50-12:20

11:28 In Vivo Quantification and Relaxometry of Compartmental Sodium in Multi Quantum Filtered Sodium Imaging in Gliomatosis Cerebri
W.A. Worthoff, A. Shymanskaya, K.-J. Langen, N.J. Shah; Institute of Neuroscience and Medicine-4, Forschungszentrum Jülich, Jülich/Germany
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 21, 11:50-12:20

11:30 Targeted multimodal nanoparticles for molecular imaging in a mouse model of atherosclerosis
C. Lorenzato¹, M. Larivière¹, S. Bonnet¹, J. Laroche Traineau¹, M.-J. Jacobin Valat¹, L. Adumeau², A. Hemadou¹, X. Santarelli³, A. Noubhani³, S. Mornet², G. Clofent Sanchez¹; ¹Centre de Résonance Magnétique des Systèmes Biologiques, Diagnostic et thérapie guidée, Université de Bordeaux, Bordeaux/France, ²Chimie des Nanomatériaux, Institut de Chimie de la Matière Condensée de Bordeaux CNRS, UPR 9048, Pessac Cedex/France, ³CBMN, Bordeaux INP, UMR 5248, Pessac/France
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

11:32 Characterisation of Cellular Expression of Matrix Metalloproteinases using MMP Biosensor Magnetic Resonance Imaging
C. Mitoko¹, F. Linke², F. Zamberlan³, J. Bray³, N.R. Thomas³, J. Krupa⁴, C. Philip⁴, G. Pavlovskaya⁵, T. Meersmann⁵, D. Macarthur⁶, B. Coyle⁷, H. Faas⁸; ¹Child Health/Sir Peter Mansfield Imaging Centre, Nottingham Medical School, Queens Medical Centre, Nottingham/United Kingdom, ²Nottingham Medical School, Queens Medical Centre, Children’s Brain Tumour Research Centre, Nottingham/United Kingdom, ³School of Chemistry, University of Nottingham, Nottingham/United Kingdom, ⁴Respiratory Medicine, Nottingham Medical School, Queens Medical Centre, Nottingham/United Kingdom, ⁵Translational Imaging, Faculty of Medicine and Health Sciences, Sir Peter Mansfield Imaging Centre, Nottingham/United Kingdom, ⁶Clinical Neurosciences: Neurosurgery, University of Nottingham, School of Medicine, Nottingham/United Kingdom, ⁷Children’s Brain Tumour Research Centre, University of Nottingham, School of Medicine, Nottingham/United Kingdom, ⁸Sir Peter Mansfield Imaging Centre, University of Nottingham, School of Medicine, Nottingham/United Kingdom
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20
Epsilon-Fe$_{1.77}$Al$_{0.23}$O$_3$ nanoparticles for cell navigation and homing

V. Herynek$^1$, A. Galisova$^1$, O. Kaman$^2$, P. Brázda$^3$, P. Veverka$^3$, L. Kubičková$^4$, L. Kosinová$^5$, M. Hajek$^1$; $^1$MR Unit, Department of Radiodiagnostic and Interventional Radiology, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, $^2$Department of Magnetics and Superconductors, Institute of Physics of the Czech Academy of Sciences, Prague/CZECH REPUBLIC, $^3$Department of Structure Analysis, Institute of Physics of the Czech Academy of Sciences, Prague/CZECH REPUBLIC, $^4$Department of Low-Temperature Physics, Faculty of Mathematics and Physics, Charles University, Prague/CZECH REPUBLIC, $^5$Experimental Medicine Department, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC

MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 21, 11:50-12:20

Characterization of neural stem cell differentiation using magnetic-resonance relaxometry and diffusion imaging

V. Phi Van, A. Becker, C. Eberhardt, A. Boss; Radiology, University Hospital Zürich, Zürich/SWITZERLAND

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

Urea CEST MRI at a clinical 3T MRI system

J. Stabinska$^1$, P. Neudecker$^2$, H.-J. Wittsack$^1$, R.S. Lanzman$^1$, A. Müller-Lutz$^1$; $^1$Department of Diagnostic and Interventional Radiology, University Dusseldorf, Dusseldorf/GERMANY, $^2$Institute of Complex Systems: Structural Biochemistry (ICS-6), Forschungszentrum Jülich, Jülich/GERMANY

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20

CEST MRI of glucosamine: from preclinical to clinical scanner

M. Rivlin$^1$, D. Barazany$^2$, G. Navon$^1$; $^1$School of Chemistry, Tel Aviv University, Tel Aviv/ISRAEL, $^2$Department of Neurobiology, Tel Aviv University, Tel Aviv/ISRAEL

MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 21, 11:50-12:20

QUESP and QUEST revisited – a more complete theory for quantification of chemical exchange saturation transfer experiments

M. Zaiss$^1$, G. Angelovski$^2$, E. Demetriou$^3$, M.T. McMahon$^4$, X. Golay$^3$, K. Scheffler$^5$; $^1$MRZ, Max-Planck Institute for biological cybernetics, Tübingen/GERMANY, $^2$MR Neuroimaging Agents, Max-Planck Institute for biological cybernetics, Tübingen/GERMANY, $^3$Brain Repair & Rehabilitation, Institute of Neurology, University College London, UK, London/UNITED KINGDOM, $^4$F.M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute, Baltimore/UNITED STATES OF AMERICA, $^5$Department of Biomedical Magnetic Resonance, University of Tuebingen, Tuebingen/GERMANY

MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 21, 11:50-12:20

Assessment of a clinically feasible Bayesian fitting algorithm using a simplified description of Chemical Exchange Saturation Transfer (CEST) Imaging: a simulated study

A. Kujawa, M. Kim, X. Golay; Brain Repair & Rehabilitation, Institute of Neurology, University College London, UK, London/UNITED KINGDOM

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20
### Scientific Programme
**SATURDAY, OCTOBER 21, 2017**

#### 418 11:46
**Investigation of correlation and coherences between APT-CEST MRI and 31P-MRSI**

J.-R. Schür1, M. Shrestha2, R. Deichmann2, M. Wagner1, U. Pilatus1; 1Department of Neuroradiology, University Hospital Frankfurt, Frankfurt Am Main/GERMANY, 2Brain Imaging Center (BIC), Goethe University Frankfurt, Frankfurt Am Main/GERMANY

**MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 11:50-12:20**

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#### 13:50–15:20
**53 Teaching Session**

**Basics of Contrast-Enhanced MRI**

Moderators: F. Schick, Tübingen/DE  
S. Kozerke, Zurich/CH

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#### 419 13:50
**Technical basics and major clinical applications**

S. Gatidis; Department of Radiology, University Hospital Tübingen, Tübingen/GERMANY

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#### 420 14:20
**Basics of CE-MRI - MR angiography**

T. Leiner; Department of Radiology, University Medical Center, Utrecht/NETHERLANDS

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#### 421 14:50
**Dynamic contrast-enhanced MR**

L. Georgiou; Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds/UNITED KINGDOM

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#### 13:50–15:20
**54 Teaching and Scientific Session**

**Novel Contrasts & Methods I**

Moderators: A. Nagel, Erlangen/DE  
D. Porter, Glasgow/UK

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#### 13:50
**Introduction**

Current State of Multi-Nuclear MRI

A. Nagel; Institute of Radiology, University Hospital Erlangen, Erlangen/GERMANY

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#### 422 14:10
**Combined amide and amine CEST imaging in non-enhancing glioma at 3 Tesla**

E.A. Warnert1, F. Incukara1, M. Van Den Bent2, A. Vincent3, C. Dirven3, T. Wood4, G.J. Barker4, M. Smits1, J.A. Hernandez-Tamames1; 1Department of Radiology & Nuclear Medicine, Erasmus University Medical Center, Rotterdam/NETHERLANDS, 2Department of Neuro-Oncology, Daniel Den Hoed Cancer Center, Rotterdam/NETHERLANDS, 3Department of Neurosurgery, Erasmus University Medical Center, Rotterdam/NETHERLANDS, 4Center for Neuroimaging Science, King’s College London, London/UNITED KINGDOM
13:50–15:20 55 Scientific Session

**Room 5**

**Diffusion Imaging**

Moderators: R. Nunes, Lisbon/PT
P. Ulloa, Lübeck/DE

**429 13:50** Diffusion in Undulating Axons: Implications for Axon Diameter Mapping and its Potential Remedy

J. Brabec¹, S. Lasic², M. Nilsson¹; ¹Clinical Sciences Lund, Radiology, Lund University, Lund/SWEDE, ²CR Development, AB, CR Development, AB, Lund/SWEDE
430 14:00  Diffusion MRI based neurite density reveals marked atrophy in the stress circuit: A chronic mild stress recovery study
A.R. Khan¹, B. Hansen¹, A. Chuhutin¹, O. Wiborg¹, C.D. Kroenke², S.N. Jespersen¹; ¹Clinical Medicine, Center of Functionally Integrative Neuroscience, Aarhus C/DENMARK, ²Behavioral Neuroscience, Advanced imaging Research center, Beaverton/UNITED STATES OF AMERICA

431 14:10  Baseline measures for diffusional kurtosis imaging in the human brain: Results from the Human Connectome Project
H. Mesri, M.C. Konijn, M. Viergever, A. Leemans; Image Sciences Institute, University Medical Center Utrecht, Utrecht/NETHERLANDS

432 14:20  Diffusion-weighted MRI of the prostate without susceptibility artifacts: undersampled radial STEAM MRI
A. Merrem, K.-D. Merboldt, J. Klosowski, J. Frahm; Biomedizinische NMR Forschungs GmbH, Max-Planck-Institut für Biophysikalische Chemie, Göttingen/GERMANY

433 14:30  Anatomical connectivity of the insula: a humans and monkey DTI study
C. Pinardi¹, G. Di Cesare², C. Carapelli¹, M. Gerbella³, G. Rizzolatti⁴; ¹Department of Medicine and Surgery, Neuroscience Unit, University of Parma, Parma/ITALY, ²Department of Robotics, Brain and Cognitive Sciences (RBCS), Istituto Italiano di Tecnologia (IIT), Genova/ITALY, ³Center for Biomolecular Nanotechnologies (CBN), Istituto Italiano di Tecnologia (IIT), Arnesano (Le)/ITALY, ⁴Istituto di Neuroscienze, Consiglio Nazionale delle Ricerche (CNR), Parma/ITALY

434 14:40  Age-related changes in mouse muscle microstructure by means of diffusion MRI and histology
P. Porcari¹, M.G. Hall², C.A. Clark², E. Greally¹, V. Straub¹, A.M. Blamire³; ¹Institute of Genetic Medicine, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM, ²Developmental Imaging and Biophysics Section, UCL GOS Institute of Child Health, London/UNITED KINGDOM, ³Institute of Cellular Medicine and Centre for In Vivo Imaging, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM

435 14:50  Brain Age Prediction Based on Cerebral White Matter Microstructural Properties
C.-L. Chen¹, P.-Y. Chen², Y.-C. Hsu², W.-Y.I. Tseng²; ¹Graduate Institute of Brain and Mind Sciences, National Taiwan University College of Medicine, Taipei/TAIWAN, ²Institute of Medical Device and Imaging, National Taiwan University College of Medicine, Taipei/TAIWAN
### 13:50–15:20 57 Lightning Talks

#### Brain and Spine - Clinical Applications

**Moderators:** T. Lindner, Kiel/DE  
R. Mulkern, Boston/US

<table>
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<th>Session</th>
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| 441 13:50 | Evaluating the reliability of cervical spine magnetization transfer imaging in the context of multicenter longitudinal studies.  
**E. Bannier**1, B. Combes2, L. Monteau1, C. Barillot3, G. Edan4, A. Kerbrat4, J.-C. Ferré1; 1Radiology, University Hospital of Rennes, Rennes/FRANCE, 2VisAGEs Research Group, Inria, Rennes/FRANCE, 3IRISA UMR 6074, CNRS, Rennes/FRANCE, 4Neurology, University Hospital of Rennes, Rennes/FRANCE

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**MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20**
442 13:52  GRASE myelin water imaging in the cervical spinal cord of neurodegenerative disease patient populations
A. Dvorak¹, E. Ljungberg², I. Vavasour³, H.K. Liu⁴, A. Rauscher⁵, J. Kramer⁴, C. Laule³, A. Mackay¹, P. Kozlowski³, S. Kolind⁶; ¹Physics and Astronomy, University of British Columbia, Vancouver/CANADA, ²Institute of Psychiatry, Psychology & Neuroscience (Neuroimaging), King’s College, London/UNITED KINGDOM, ³Radiology, University of British Columbia, Vancouver/CANADA, ⁴Medicine (iCord Centre), University of British Columbia, Vancouver/CANADA, ⁵Pediatrics (Neurology), University of British Columbia, Vancouver/CANADA, ⁶Medicine (Neurology), University of British Columbia, Vancouver/CANADA
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

443 13:54  Investigation of lumbar intervertebral discs and cartilage endplates using ultra-short TE
H. Takashima¹, T. Takebayashi², I. Ogon³, M. Yoshimoto³, M. Yanagida¹, R. Imamura¹, Y. Akatsuka¹, M. Nakanishi¹, M. Hatakenaka², T. Yamashita³; ¹Division of Radiology and Nuclear Medicine, Sapporo Medical University Hospital, Sapporo/JAPAN, ²Orthopaedic Surgery, Sapporo Maruyama Orthopaedic Hospital, Sapporo/JAPAN, ³Department of Orthopaedic Surgery, Sapporo Medical University School of Medicine, Sapporo/JAPAN
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 21, 14:50-15:20

444 13:56  WITHDRAWN

445 13:56  3D ⁷Li MAGNETIC RESONANCE IMAGING OF BRAIN LITHIUM DISTRIBUTION IN PATIENTS TREATED FOR BIPOLAR DISORDER
F.E. Smith¹, C. Flowers², P.E. Thelwall¹, A.M. Blamire¹, D. Cousins²; ¹Institute of Cellular Medicine and Centre for In Vivo Imaging, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM, ²Institute of Neuroscience, Newcastle University, Newcastle Upon Tyne/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

446 13:58  Clinical brain QSM acquisition and automated processing at 3T and 7T for routine use
L. De Rochefort¹, O. Girard¹, A. Le Troter¹, P. Spincemaille², L. Pini¹, P. Viout¹, A. Eusébio³, S. Gherib¹, A. Maaroufi¹, W. Zaaraoui¹, S. Confort-Gouny¹, M. Guye¹, J.-P. Ranjeva¹, Y. Wang²; ¹CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE, ²Radiology, Weill Medical College of Cornell University, New York/UNITED STATES OF AMERICA, ³Neurology department / Institut de neurosciences de la Timone, UMR 7289, CNRS Aix-Marseille université, Timone university hospital, Aix-Marseille university, Marseille/FRANCE
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20
Downfield CEST signals of the ischaemic core in quantitative imaging of hyperacute stroke

Y. Msayib¹, G. Harston², K. Ray³, B. Sutherland², F. Sheerin², N. Blockley⁴, T. Okell⁴, P. Jezzard⁴, A. Baldwin⁵, N. Sibson⁶, J. Kennedy², M. Chappell⁷; ¹Institute of Biomedical Engineering, University of Oxford, Oxford/UNITED KINGDOM, ²Radicliffe Department of Medicine, University of Oxford, Oxford/UNITED KINGDOM, ³Department of Oncology, University of Oxford, Oxford/UNITED KINGDOM, ⁴Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford/UNITED KINGDOM, ⁵Department of Chemistry, University of Oxford, Oxford/UNITED KINGDOM

MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 21, 14:50-15:20

Arterial Spin Labelling reveals chronic decreased cerebral blood flow after both moderate/severe traumatic brain injury and sports-related concussions

M. Fahlström¹, F. Vedung², A. Wall¹, G. Antoni³, M. Lubberink¹, N. Marklund², E.-M. Larsson¹; ¹Surgical Sciences, Uppsala University, Uppsala/SWEDEN, ²Neuroscience, Uppsala University, Uppsala/SWEDEN, ³Medicinal Chemistry, Uppsala University, Uppsala/SWEDEN

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

A correlative analysis of T1-weighted DCE-MRI derived perfusion parameters in glioblastoma (GBM) patients receiving neural stem cell (NSC)-based treatment

P. Sahoo¹, P. Frankel², J. Portnow³, K. Aboody⁴, A.J. Annala⁴, J. Ressler⁵, M. Gutova⁴, B. Badie⁶, M. D’Appuzzo⁷, R. Rockne¹; ¹Division of Mathematical Oncology, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, ²Division of Biostatistics, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, ³Department of Medical Oncology & Therapeutics, City of Hope, Duarte/UNITED STATES OF AMERICA, ⁴Department of Developmental & Stem Cell Biology, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, ⁵Diagnostic Radiology, City of Hope, Duarte/UNITED STATES OF AMERICA, ⁶Division of Neurosurgery, City of Hope, Duarte/UNITED STATES OF AMERICA, ⁷Department of Pathology, City of Hope, Duarte/UNITED STATES OF AMERICA

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

Assessing the Reliability of Simultaneous Multi-Slice on the Tractography of the Trigeminal Nerve

S.L.L. Lim¹, C.N. Ann², S.M. Ng¹, P.Y. Teh¹, Y.S. Kiew¹, H. Rumpel¹, L.L. Chan¹; ¹Diagnostic Radiology, Singapore General Hospital, Singapore/SINGAPORE, ²Research, National Neuroscience Institute, Singapore/SINGAPORE

MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 21, 14:50-15:20

Sensitivity of non-Gaussian diffusion metrics in chronic disorders of consciousness

E. Kremneva¹, I. Maximov², L. Legostaeava³, D. Sergeev⁴, M. Krotenkova¹, A. Suslin¹, N. Suponeva³, M. Piradov⁴; ¹Radiology, Research Center of neurology, Moscow/ RUSSIAN FEDERATION, ²Experimental Physics III, TU Dortmund, Dortmund/GERMANY, ³Neurorehabilitation, Research Center of neurology, Moscow/ RUSSIAN FEDERATION, ⁴Intensive care unit, Research Center of neurology, Moscow/ RUSSIAN FEDERATION

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20
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<tr>
<td>14:10</td>
<td>Physical parameterization of relaxation curves in GRE sequences</td>
<td>A. Protopopov; Department of Biological and Medical Physics, Moscow Institute of Physics and Technology, Dolgoprudny/ RUSSIAN FEDERATION</td>
<td>[MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 21, 14:50-15:20]</td>
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<tr>
<td>14:12</td>
<td>Automatic Quantification of Traumatic Brain Lesions in Diffusion Tensor Imaging</td>
<td>C. Maggia¹, T. Mistral², S. Doyle³, A. Krainik⁴, D. Galanaud⁵, E. Barbier⁶, J.-F. Payen⁵, M. Dojat⁶; ¹Equipe Neuroimagerie fonctionnelle et perfusion cérébrale, GIN, La Tronche/ FRANCE, ²Anesthésie Réanimation, CHU de Grenoble, La Tronche/FRANCE, ³Pixyl, Pixyl, La Tronche/FRANCE, ⁴Neuroradiologie, IRM, CHU de Grenoble, La Tronche/FRANCE, ⁵Neuroradiologie, HU Paris Pitié-Salpêtrière, Paris/FRANCE</td>
<td>[MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 21, 14:50-15:20]</td>
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<td>14:14</td>
<td>Comparative study of brain atrophy measures in CIS and MS patients: preliminary results of a cross-sectional analysis.</td>
<td>S. Cappelle¹, D. Pareto², A. Rovira³, M. Tintoré⁴, A. Vidal⁴, R. Alyafeai⁴, M. Alberich⁴, J. Sastre-Garriga⁴, C. Auger⁴, X. Montalban⁴; ¹MR Unit, radiology department, Vall d’Hebron Hospital, Barcelona/SPAIN, ²MR Unit, radiology department, Vall d’Hebron, Barcelona/SPAIN, ³Radiology, Hospital Vall d’Hebrón, Barcelona/SPAIN, ⁴Department of neurology-neuroimmunology and multiple sclerosis of Catalonia (cemcat), Hospital Vall d’Hebrón, Barcelona/SPAIN</td>
<td>[MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 21, 14:50-15:20]</td>
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<td>14:18</td>
<td>Multi-Parametric Maps From Multi-contrasts Steady-State Sequences on Multiple Manufacturers and Fields</td>
<td>L. De Rochefort¹, L. Leroi², R. Valabrègue³, O. Girard¹, G. Duhamel¹, M. Santin³, P. Loureiro De Sousa⁴, J. Lamy⁴, F. Mauconduit⁵, R.-M. Dubuisson⁵, G. Guillot⁵, A. Vignaud²; ¹CRMBM / UMR 7339 CNRS, Aix Marseille Université, Marseille/FRANCE, ²Neurospin, CEA, Orsay/FRANCE, ³CENIR, Institut Cerveau Moelle – ICM, UPMC-Inserm U1127, CNRS 7225, Paris/FRANCE, ⁴ICube, CNRS, ICube, FMTS, Université de Strasbourg, Strasbourg/FRANCE, ⁵Siemens Healthcare, Siemens Healthineers, Saint-Denis/FRANCE, ⁶IF4M (Imagerie par Résonance Magnétique Médicale et Multi-modalités), Univ. Paris-Sud, CNRS, UMR8081, Université Paris-Saclay, Orsay/FRANCE</td>
<td>[MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 21, 14:50-15:20]</td>
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</table>
Apparent diffusion coefficient values of the normal fetal brain developing
S. Capuani1, A. Antonelli2, M. Guerrero3, S. Bernardo2, C. Catalano2, L.
Manganaro2; 1Physics dpt. Sapienza University of Rome, CNR ISC, Rome/ITALY, 2Department
of Radiological, Oncological and Pathological Sciences, Sapienza University, Rome/ITALY,
3SAIMLAL Dept., Morphogenesis & Tissue Engineering, La Sapienza University of Rome, Rome/
ITALY
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 21, 14:50-15:20

Longitudinal changes of R2 stars and diffusion parameters in substantia
nigra of Parkinson’s disease patients.
G. Arribarat1, O. Pasternak2, G. Barbagallo3, A. Deviers1, G. Mogicato1, O.
Rascol1, P. Peran1; 1ToNIC, Toulouse Neuroimaging Center, UMR 1214 - INSERM/UPS -
ToNIC, Toulouse/FRANCE, 2Psychiatry and Radiology, Harvard Medical School, Boston/UNITED
STATES OF AMERICA, 3Institute of Neurology, University Magna Graecia, Catanzaro/ITALY
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

DSC, DCE and FET-PET: Comparison of cerebral blood volume in
metabolically defined tumor volume
M. Lundemann1, O. M. Henriksen1, L. Marner1, V. A. Larsen2, I. Law1, A. Espe
Hansen1, H. B. W. Larsson3; 1Department of Clinical Physiology, Nuclear Medicine and PET,
Rigshospitalet, København Ø/DENMARK, 2Department of Radiology, Rigshospitalet, København
Ø/DENMARK, 3Functional Imaging Unit, Department of Clinical Physiology, Nuclear Medicine
and PET, Rigshospitalet, Glostrup/DENMARK
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

A topological method for automatic segmentation of glioblastoma in MR
FLAIR for radiotherapy
G. Belmonte1, V. Ciancia2, D. Latella2, M. Massink2, M. Biondi3, G. De Otto4,
V. Nardone4, G. Rubino4, E. Vanzi1, F. Banci Buonamici1; 1Medical Physics, Azienda
Ospedaliera Universitaria Senese, Siena/ITALY, 2Istituto di Scienza e Tecnologie dell’Informazione
“A. Faedo”, Consiglio Nazionale delle Ricerche, Pisa/ITALY, 3Physics, Università degli Studi di
Siena, Siena/ITALY, 4Radiotherapy, Azienda Ospedaliera Universitaria Senese, Siena/ITALY
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

Type 2 Diabetes Exacerbates Structural Brain Changes in Middle-Aged
Morbidly Obese Patients
S. Gazdzinski1, A. Gazdzinski1, A. Gazdzinska2, M. Gorycka3, R. Pacho3, J.
Walecki3, M. Wylezol4; 1MRI, Military Institute of Aviation Medicine, Warsaw/POLAND,
2Obesity and Nutrition, Military Institute of Aviation Medicine, Warsaw/POLAND, 3Radiology,
Military Institute of Aviation Medicine, Warsaw/POLAND, 4Surgery, Military Institute of Aviation
Medicine, Warsaw/POLAND
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

Assessing B1+ inhomogeneity with the variable-flip-angle method
W. Nordhøy1, S. Nerland2, Ø.B. Gadmar1; 1Diagnostic Physics, Oslo University Hospital,
Division of Radiology and Nuclear Medicine, Oslo/NORWAY, 2Diakonhjemmet Hospital,
Department of Psychiatric Research, Oslo/NORWAY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 21, 14:50-15:20
463 14:32 Sampling Order Optimization for contrast preservation in accelerated prospective 3D MRI
A.J.V. Benjamin1, W. Bano1, M. Davies1, I. Marshall2; 1Institute for Digital Communications, University of Edinburgh, Edinburgh/UNITED KINGDOM, 2Centre for Clinical Brain Sciences, University of Edinburgh, Edinburgh SB/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

464 14:34 GPU accelerated Slice-GRAPPA implementation
M. Qureshi1, O. Inam2, H. Omer2; 1Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/Pakistan, 2Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/Pakistan
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 21, 14:50-15:20

465 14:36 Accelerating MRI using Non-Cartesian Radial k-space Trajectory
A.R. Shahid, I. Aslam, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, PAKISTAN
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 14:50-15:20

466 14:38 POCS-SENSE based reconstruction of Multislice Parallel Imaging
Z. Javed, I. Aslam, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, PAKISTAN
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 21, 14:50-15:20

467 14:40 Quantitative comparison of brain volumes as assessed by SPM, SIENA/X and MorphoBox software packages
J. Alonso1, D. Pareto1, M. Alberich1, T. Kober2, X. Lladó3, A. Rovira1; 1Unitat de Ressonància Magnètica - Servei de Radiologia, Hospital Universitari Vall d’Hebron - Institut de Diagnòstic per la Imatge, Barcelona/SPAIN, 2Advanced Clinical Imaging Technology (HC CMEA SUI DI BM PI), Siemens Healthcare AG, Lausanne/SWITZERLAND, 3 Department of Computer Architecture and Technology, University of Girona, Girona/SPAIN
MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 21, 14:50-15:20

468 14:42 T1 mapping for the assessment of the substantia nigra in Parkinson disease
C. Juri1, L. Tapia2, J.P. Cruz2, S. Uribe2, M. Andia2; 1Neurology Department, Pontificia Universidad Catolica de Chile, Santiago/CHILE, 2Radiology Department, Pontificia Universidad Catolica de Chile, Santiago/CHILE
MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 21, 14:50-15:20

469 14:44 Characterization of multiple sclerosis forms through fiber-bundle profile analysis
G. Kocevar, C. Stamile, F. Cotton, F. Durand-Dubief, D. Sappey-Marinier; CREATIS, Université Claude Bernard Lyon1, Villeurbanne/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 21, 14:50-15:20
Measuring cerebral hypoperfusion induced by hyperventilation challenge in healthy subjects with Diffusional Kurtosis Imaging (DKI) incorporated into Intravoxel Incoherent Motion (IVIM) MR model.

A. Pavilla\textsuperscript{1}, G. Gambarota\textsuperscript{1}, A. Arrigo\textsuperscript{2}, M. Mejdbi\textsuperscript{2}, R. Duvaufferier\textsuperscript{2}, H. Saint-Jalmes\textsuperscript{1}; \textsuperscript{1}LTSI, INSERM UMR 1099, Rennes University, Rennes/FRANCE, \textsuperscript{2}Department of Neuroradiology, Pierre-Zobda-Quitman Hospital, University Hospital of Martinique, French West Indies, France, CHU Martinique, Fort-De-France/MARTINIQUE

MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 21, 14:50-15:20

Investigation of primary somatosensory area with 7T functional MRI by using a pneumatic tactile stimulus.

L. Biagi\textsuperscript{1}, P. Cecch\textsuperscript{2}, S. Fiori\textsuperscript{3}, G. Donatelli\textsuperscript{2}, A. Guzzetta\textsuperscript{4}, G. Cioni\textsuperscript{4}, M. Tosetti\textsuperscript{2}; \textsuperscript{1}Laboratory of Medical Physics and Magnetic Resonance, IRCCS Fondazione Stella Maris, Pisa/ITALY, \textsuperscript{2}Department of Translational Research and New Technologies in Medicine and Surgery, University of Pisa, Pisa/ITALY, \textsuperscript{3}Developmental Neuroscience, IRCCS Fondazione Stella Maris, Pisa/ITALY, \textsuperscript{4}Department of Clinical and Experimental Medicine, University of Pisa, Pisa/ITALY

Perfusion changes following elective surgery in the elderly

H.J. Mutsaerts\textsuperscript{1}, I. Kant\textsuperscript{2}, J. Petr\textsuperscript{3}, G. WInterer\textsuperscript{4}, C. Spies\textsuperscript{4}, T. Pischon\textsuperscript{5}, I. Asllani\textsuperscript{6}, A. Slooter\textsuperscript{7}, J. Hendrikse\textsuperscript{2}; \textsuperscript{1}Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, \textsuperscript{2}Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS, \textsuperscript{3}PET center, Institute of Radiopharmaceutical Cancer Research, Helmholtz-Zentrum Dresden-Rossendorf, Dresden/GERMANY, \textsuperscript{4}Dept. of Anesthesiology, Operating-Room, The Charité, Berlin/GERMANY, \textsuperscript{5}Molecular Epidemiology, Max Delbrück Center for Molecular Medicine, Berlin/GERMANY, \textsuperscript{6}Department of Biomedical Engineering, Rochester Institute of Technology, Rochester/UNITED STATES OF AMERICA, \textsuperscript{7}Neurology, University Medical Center Utrecht, Utrecht/NETHERLANDS

Small-world properties characterize the brain of olfactory synesthetes: a graph theory analysis of Resting State fMRI data

H. Melero, M. Gil-Correa, J. Vera-Olmos, E. Pardo, N. Malpica, S. Borromeo; Medical Image Analysis Laboratory, Universidad Rey Juan Carlos, Madrid/SPAIN

Measuring functional connectome disruption in chronic disorders of consciousness

E. Kremneva\textsuperscript{1}, D. Sinitsyn\textsuperscript{2}, S. Morozova\textsuperscript{1}, L. Legostaeva\textsuperscript{2}, D. Sergeev\textsuperscript{3}, E. Mochalova\textsuperscript{4}, A. Poydasheva\textsuperscript{4}, O. Chervyakova\textsuperscript{2}, Y. Ryabinkina\textsuperscript{3}, N. Suponeva\textsuperscript{2}, M. Piradov\textsuperscript{3}; \textsuperscript{1}Radiology, Research Center of neurology, Moscow/RUSSIAN FEDERATION, \textsuperscript{2}Neurorehabilitation, Research Center of neurology, Moscow/RUSSIAN FEDERATION, \textsuperscript{3}Intensive care unit, Research Center of neurology, Moscow/RUSSIAN FEDERATION

Connectivity changes in patients with different cerebral small vessel disease severity

S. Morozova\textsuperscript{1}, E. Kremneva\textsuperscript{1}, Z. Gadzhieva\textsuperscript{2}, M. Zaitova\textsuperscript{2}, B. Akhmetzyanov\textsuperscript{1}, M. Krotenkova\textsuperscript{1}, L. Dobrynina\textsuperscript{2}; \textsuperscript{1}Radiology, Research Center of neurology, Moscow/RUSSIAN FEDERATION, \textsuperscript{2}Neurology III, Research Center of neurology, Moscow/RUSSIAN FEDERATION
476 16:30 Head motion control and resting-state fMRI brain complexity
C. De Vries¹, R. Staff², G. Waiter¹, M. Sokunbi³, A. McIntosh⁴, A. Murray¹;
¹Biomedical Imaging Centre, University of Aberdeen, Aberdeen/UNITED KINGDOM, ²Imaging
Physics, NHS Grampian, Aberdeen/UNITED KINGDOM, ³Faculty of Health and Life Sciences,
De Montfort University, Leicester/UNITED KINGDOM, ⁴Centre for Cognitive Ageing and
Cognitive Epidemiology, University of Edinburgh, Edinburgh/UNITED KINGDOM

477 16:40 Personalizing the Assessment of Chemotherapy-Related Cognitive
Impairment Using Z-Score Fractal rs-BOLD and DTI Analysis.
O.M. Dona Lemus¹, M. Doughty¹, R. Wong², G. Hall³, M. Noseworthy⁴;
¹Biomedical Engineering, McMaster University, Hamilton/CANADA, ²Radiation Oncology,
McMaster University, Hamilton/CANADA, ³Psychology, Neuroscience and Behaviour, McMaster
University, Hamilton/CANADA, ⁴Electrical and Computer Engineering, McMaster University,
Hamilton/CANADA

15:40–16:50 59 Scientific Session
Room 6
Novel Contrasts & Methods II
Moderators: M. Weiger, Zurich/CH
L. Knutsson, Lund/SE

478 15:40 Whole brain Inhomogeneous Magnetization Transfer (ihMT) imaging: a
sensitivity-enhanced sequence designed for clinical investigation
S. Mchinda¹, G. Varma², V.h. Prevost¹, A. Le Troter¹, M. Guye³, J. Pelletier³, J.-P.
Ranjeva¹, D. Alsop², G. Duhamel¹, O. Girard¹; ¹Bouches du Rhones, Aix Marseille Univ,
CNRS, CRMBM UMR 7339, Marseille/FRANCE, ²Department of MR research, Harvard Medical
School, Boston/UNITED STATES OF AMERICA, ³Service de Neurologie, Hôpital La Timone -
Pôle de neurosciences cliniques, Marseille/FRANCE

479 15:50 Quantitative In Vivo Imaging Using a 3D Two-Point Method
M. Schall, M. Zimmermann, E. Iordanishvili, Y. Gu, N.J. Shah, A.-M. Oros-
Peusquens; Institute of Neuroscience and Medicine 4, Forschungszentrum Jülich GmbH,
Jülich/GERMANY

480 16:00 Upward Movement of Human CSF In Vivo and its Relation to the Brain
Venous System Detected by Real-Time Phase-Contrast Flow MRI
S. Dreha-Kulaczewski¹, A. Joseph², K.-D. Merboldt², H.-C. Ludwig³, J. Gärtner¹,
J. Frahm²; ¹Department of Pediatric and Adolescent Medicine, University Medicine Göttingen,
Göttingen/GERMANY, ²Max-Planck-Institut für biophysikalische Chemie, Biomedizinische NMR
Forschungs GmbH, Göttingen/GERMANY, ³Department of Neurosurgery, University Medicine
Göttingen, Göttingen/GERMANY
15:40–17:10 60 Scientific Session

Animal Models: Brain and Non-Brain

Moderators: A.-K. Bouzier-Sore, Bordeaux/FR
A. Viola, Marseille/FR

485 15:40 Impaired hypothalamic glucose metabolism in HFD mice. An in vivo $^{13}$C MRS study.

B. Lizarbe$^1$, H. Lei$^2$, A. Cherix$^1$, R. Gruetter$^3$; $^1$Laboratory for Functional and Metabolic Imaging (LIFMET), Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, $^2$Centre d’Imagerie Biomédicale (CIBM), Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, $^3$Laboratory for Functional and Metabolic Imaging (LIFMET), Department of Radiology, University of Lausanne and University of Geneva, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND

486 15:50 Functional MEMRI and HRMAS studies of brain regions in a mild depression model developed in female rats

D. Alcázar, M.J. Guillén, T. Navarro-Hernanz, P. López-Larrubia; Instituto de Investigaciones Biomédicas, CSIC-UAM, Madrid/SPAIN

487 16:00 DTI and 1H-MRS characterization of brain sequellae in a murine model of cerebral malaria

T.-A. Perles-Barbacaru, I. Varlet, H. Bertinetti, Y. Le Fur, E. Pecchi, M. Bernard, A. Viola; Centre de Résonance Magnétique Biologique et Médicale UMR CNRS 7339, CNRS-Université Aix-Marseille, Marseille/FRANCE
488 16:10  Ultra-high field magnetic resonance microimaging to access brain lesions in Zebrafish model of megalencephalic leukoencephalopathy
U. Roy1, M. Eeza2, R. Estévez3, A. Barrallo-Gimeno3, J. Matysik1, A. Alía4; 1Faculty of chemistry and mineralogy, Institute for analytic chemistry, Leipzig/GERMANY, 2Faculty of Medicine, Institute of Medical Physics and Biophysics, Leipzig/GERMANY, 3Departamento de Ciencias Fisiológicas II, Sección de Fisiología, Barcelona/SPAIN, 4University of Leipzig, Institut für Medizinische Physik und Biophysik, Leipzig/GERMANY

489 16:20  Early characterization of a rat model of Alzheimer’s Disease based on structural and functional connectomics and neurobehavior.
E. Muñoz-Moreno1, R. Tudela2, X. López-Gil1, G. Soria1; 1Experimental 7T MRI Unit, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona/SPAIN, 2GIB-UB, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona/SPAIN

490 16:30  Real time cell tracking of single immune cells in the mouse brain by time lapse MRI
M. Masthoff1, S. Gran2, X. Zhang3, L. Wachsmuth1, M. Bietenbeck4, A. Becker5, W. Heindel5, L. Sorokin3, J. Roth2, M. Eisenblätter6, C. Faber1; 1Clinical Radiology, Universityhospital Münster, Münster/GERMANY, 2Institute of Immunology, University Hospital Münster, Münster/GERMANY, 3Institute for Physiological Chemistry & Pathobiocchemistry, University Hospital Münster, Münster/GERMANY, 4Department of Cardiology and Angiology, University Hospital Münster, Münster/GERMANY, 5Clinical Radiologie, University Hospital Münster, Münster/GERMANY

491 16:40  Multiparametric MRI assessment of proton therapy in tumor animal model
W. Węglarz1, K. Kalita1, K. Jasiński1, J. Swakoń1, B.S. Soerensen2; 1Department of Magnetic Resonance Imaging, Institute of Nuclear Physics, Polish Academy of Sciences, Kraków/Poland, 2Department of Experimental Clinical Oncology, Aarhus University Hospital, Aarhus/Denmark

492 16:50  Diffusion MRI for probing microstructural changes in a mouse model of Duchenne muscular dystrophy
P. Porcari1, M. Hall2, C.A. Clark2, E. Greally1, V. Straub1, A.M. Blamire3; 1Institute of Genetic Medicine, Newcastle University, Newcastle Upon Tyne/United Kingdom, 2Developmental Imaging and Biophysics Section, UCL GOS Institute of Child Health, London/United Kingdom, 3Institute of Cellular Medicine and Centre for In Vivo Imaging, Newcastle University, Newcastle Upon Tyne/United Kingdom
Impact of Non-alcoholic Fatty Liver on the Cardiac Phenotype Assessed by Cardiovascular Magnetic Resonance

M. Rothe¹, T. Jelenik¹, E. Álvarez-Hernández¹, J. Kotzka², J.-H. Hwang¹, J. Szendroedi¹, M. Roden¹, U. Flögel³; ¹Institute for Clinical Diabetology, German Diabetes Center at Heinrich Heine University, Leibniz Institute for Diabetes Research, Düsseldorf/GERMANY, ²Institute of Clinical Biochemistry and Pathobiochemistry, German Diabetes Center at Heinrich Heine University, Leibniz Institute for Diabetes Research, Düsseldorf/GERMANY, ³Department of Molecular Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf/GERMANY

15:40–17:10 61 Spanish Experts Sessions
MR Preclínica
Moderators: I. Barba, Barcelona/ES
M. Julià-Sapé, Barcelona/ES

Monitorización del metabolismo celular en modelos de enfermedad mediante espectroscopia RM multinuclear: cáncer, restricción de crecimiento fetal y enfermedad de Alzheimer

R.V. Simoes; Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona/SPAIN

Imagen molecular mediante IERM de la respuesta al tratamiento en el modelo de glioblastoma murino GL261

A.P. Candiota; Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Centro de Investigación Biomédica en Red, Cerdanyola Del Vallès/SPAIN

Nanopartículas Magnéticas para Imagen Molecular por MRI (MMRI)

M. Pernía Leal¹, C. Caro², M..C. Muñoz-Hernández³, M.L. García-Martín²; ¹Departamento de Química Orgánica y Farmacéutica, Universidad de Sevilla, Sevilla/SPAIN, ²Nanodiagnostics, BIONAND, Andalusian Centre for Nanomedicine and Biotechnology, Málaga/SPAIN, ³NanolImaging, BIONAND, Andalusian Centre for Nanomedicine and Biotechnology, Málaga/SPAIN

15:40–17:10 62 Lightning Talks
MR Spectroscopy Methods and Applications
Moderators: E. Danielsen, Copenhagen/DK
J.J. Prompers, Utrecht/NL

Low SAR Lipid Suppression for MRSI at Ultra-high Fields

P. Chang¹, S. Nassirpour¹, A. Henning²; ¹Ultra-high field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tübingen/GERMANY, ²Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 21, 16:40-17:10

Improved consistency by automated MRS voxel placement in the hippocampus

B. Rowland; Cardiff University Brain Research Imaging Centre, Cardiff University, Cardiff/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10
<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Meeting Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>15:44</td>
<td>Reduction of Acquisition time by Partition of the signal Decay in Spectroscopic Imaging (RAPID-SI) technique: A New approach for high speed spectroscopic imaging.</td>
<td>S. Bhaduri, E. Achten, H. Serrai; Department of Radiology and nuclear medicine, University of Ghent, Gent/BELGIUM</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10</td>
</tr>
<tr>
<td>501</td>
<td>15:46</td>
<td>The necessity of parametrizing macromolecules for accurate quantification of ultra-short TE and TR 1H FID MRSI data at 9.4T</td>
<td>S. Nassirpour, P. Chang, A. Henning; Ultra-high field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 21, 16:40-17:10</td>
</tr>
<tr>
<td>502</td>
<td>15:48</td>
<td>Characterization of macromolecular baseline of human brain using metabolite cycled semi-LASER at 9.4 T</td>
<td>I.-A. Giapitzakis¹, N. Avdievitch¹, A. Henning²; ¹Ultra High Field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY, ²Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10</td>
</tr>
<tr>
<td>503</td>
<td>15:50</td>
<td>Optimizing acquisition and fitting conditions for 1H MRS investigations of global brain pathology</td>
<td>M. Hoefemann, V. Adalid, R. Kreis; Radiology and Clinical Research, University of Bern, Bern/SWITZERLAND</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10</td>
</tr>
<tr>
<td>504</td>
<td>15:52</td>
<td>Impact of CRLB thresholds applied on metabolites levels estimated from over 300 mouse brain MR spectra in vivo.</td>
<td>S. Cuellar Baena¹, D. Kirik², R. In ’T Zandt³; ¹7T National Facility and Diagnostic Radiology Department, Lund University, Lund/SWEDEN, ²Experimental Medical Sciences, Lund University, Lund/SWEDEN, ³Lund Biomaging Center LBIC, Lund University, Lund/SWEDEN</td>
<td>MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 21, 16:40-17:10</td>
</tr>
<tr>
<td>505</td>
<td>15:54</td>
<td>Generalizing GESSE to the Spectroscopic Domain: The Good, the Bad and the Ugly</td>
<td>R. Mulkern, M. Balasubramanian; Department of Radiology, Harvard Medical School, Boston Children’s Hospital, Boston/UNITED STATES OF AMERICA</td>
<td>MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10</td>
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Magnetic Resonance Spectroscopy data water suppression using squared sigmoid functions of the Schrödinger operator
A. Chahid¹, T.M. Laleg-Kirati¹, E. Achten², H. Serrai²; ¹Computer, Electrical and Mathematical Science and Engineering (CEMSE) division, King Abdullah University of Sciences and Engineering (KAUST), Thuwal/SAUDI ARABIA, ²Department of Radiology and nuclear medicine, University of Ghent, Gent/BELGIUM
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10

MRSI and a supervised classifier predict treatment response in glioblastoma: preliminary results
M. Julià-Sapé¹, A. Pons², C. Arús³, M. Gil-Gil⁴, C. Majós²; ¹Bioingeniería, Biomaterales y Nanomedicina (CIBER-BBN), Centro de Investigación Biomédica en Red, Cerdanyola Del Vallès/SPAIN, ²Hospital Universitari de Bellvitge, Department of Radiology, Institut de Diagnóstic per la Imatge, L'hospitala Del Llobregat/SPAIN, ³Bioquímica i Biologia Molecular, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN, ⁴IDIBELL, Institut Catala d'Oncologia, L'hospitala Del Llobregat/SPAIN
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 21, 16:40-17:10

Quantification of Relative ω-3 Fatty Acid Levels with Localized Magnetic Resonance Spectroscopy at 3 T
C.J. Fallone¹, A. Yahya²; ¹Department of Oncology, University of Alberta, Edmonton/CANADA, ²Department of Medical Physics and Department of Oncology, Cross Cancer Institute and University of Alberta, Edmonton/CANADA
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 21, 16:40-17:10

Improving In-Vivo Fat Unsaturation Quantification using Olefinic to Methyl Ratios Obtained with Magnetic Resonance Spectroscopy
C.J. Fallone¹, A. Yahya²; ¹Department of Oncology, University of Alberta, Edmonton/CANADA, ²Department of Medical Physics and Department of Oncology, Cross Cancer Institute and University of Alberta, Edmonton/CANADA
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 21, 16:40-17:10

Profiling of liver lipid composition with ¹H MRS using fractionated dipole antennas at 7T
K.S. Milde, C.S. Arteaga De Castro, W.J. Van Der Kemp, H. Hoogduin, P. Luijten, D. Klomp, J.J. Prompers; Department of Radiology, University Medical Center Utrecht, Utrecht/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 21, 16:40-17:10

Non-invasive measurement of acute effects of high intensity interval training on bone marrow composition in healthy controls and Type 2 Diabetes Mellitus
A. Bierwagen, M. Apostolopoulou, M. Röhling, J.-H. Hwang, M. Roden; Institute for Clinical Diabetology, German Diabetes Center, Düsseldorf/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 21, 16:40-17:10

Compressed Sensing for ¹H MRSI in the Human Brain at 9.4T
P. Chang¹, S. Nassirpour¹, A. Henning²; ¹Ultra-high field Magnetic Resonance, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY, ²Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 21, 16:40-17:10
513 16:10 Metabolic effects of the light deprivation in the prefrontal cortex of the depression-like rats: In vivo proton magnetic resonance spectroscopy at 7T
C.-H. Yoo1, S.-I. Lim1, K.-H. Song1, H.-J. Kim1, D.-C. Woo2, B.-Y. Choe1; 1Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF, 2Asan Institute for Life Sciences, Asan Medical Center, Seoul/KOREA, REPUBLIC OF
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 21, 16:40-17:10

514 16:12 31P MRS study of hypebaric oxygenation effects on brain metabolism at 3 Tesla
A. Manzhurtsev1, O. Vasiukova2, V. Sergeeva3, I. Melnikov4, N. Zaitseva3, T. Akhadov4, N. Semenova5; 1504, N.M. Emanuel Institute of Biochemical Physics of the Russian Academy of Sciences, Moscow/RUSSIAN FEDERATION, 2Medical Physics, National Research Nuclear University “MEPhI”, Moscow/RUSSIAN FEDERATION, 3Hyperbaric Oxygenation dept., Research Institute of Children Emergency Surgery and Traumatology, Moscow/RUSSIAN FEDERATION, 4Radiology, Clinical and Research Institute of Emergency Children’s Surgery and Trauma, Moscow/RUSSIAN FEDERATION, 5Dynamic of Chemical and Biological Processes, Semenov Institute of Chemical Physics of RAS (ICP RAS), Moscow/ RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 21, 16:40-17:10

515 16:14 Increase of [GABA-] following pediatric mTBI in the acute phase
P. Menschchikov1, M. Ublinskiy2, T. Akhadov2, N. Semenova1; 1Dynamic of Chemical and Biological Processes, Semenov Institute of Chemical Physics of RAS (ICP RAS), Moscow/ RUSSIAN FEDERATION, 2Radiology, Clinical and Research Institute of Emergency Children’s Surgery and Trauma, Moscow/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 21, 16:40-17:10

516 16:16 Importance of early spectral variations during 48 months of longitudinal MRI and MRS follow-up in 90 patients treated glioblastomas.
J.-M. Constans1, A. Heintz1, J.p. Chombar1, O. Selo1, N. Deleval1, R. Hanafi1, D. Michel1, A. Galmiche1, A. Vasseur1, F. Dallery1, A. Niro1, C. Corcy1, W. Bocquet1, F. Ferri1, C. Ly Mony1, A. Osaer1, C. Damien1, S. Metembou1, W. Dou2, W. Dou2, S. Ruan3, D. Le Gars1, O. Baledent1, H. Deramond1, A. Houessinon1, A. Fichten1, M. Lefranc1, A. Coutte1, P. Toussaint1, C. Desenclos1, B. Chauffert1, M. Boone1; 1Somme, CHU Amiens Picardie, Salouël/FRANCE, 2Electronics, Tsinghua University, Beijing/CHINA, 3Medical Imaging, Université de Rouen, Rouen/FRANCE
MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10
Non-invasive in-situ ethanol quantification by magnetic resonance spectroscopy: a feasibility study in 15 human cadavers

N. Zoelch¹, A. Hock², M. Thali¹, D. Gascho¹; ¹Institute of Forensic Medicine, University of Zurich, Zurich/SWITZERLAND, ²Department of Psychiatry, Psychotherapy and Psychosomatics, University of Zurich, Zurich/SWITZERLAND

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10

High-fat diet induced major depression like neurochemical changes in the hippocampus by using in vivo magnetic resonance spectroscopy at 9.4T

S.-I. Lim, K.-H. Song, C.-H. Yoo, H.-J. Kim, B.-Y. Choe; Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF

MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 21, 16:40-17:10

UNSUPERVISED SOURCE EXTRACTION FROM BRAIN MAGNETIC RESONANCE SPECTROSCOPY DATA IN A STROKE RAT MODEL USING CONVEX NON-NEGATIVE MATRIX FACTORIZATION

E. Jiménez-Xarrié¹, V. Mocioiu², M. Julià-Sapé³, S. Ortega-Martorell⁴, R. Delgado-Mederos¹, J. Martí-Fàbrregas¹, A.P. Candiota³, C. Arús²; ¹Neurology, Hospital de la Santa Creu i Sant Pau, Barcelona/SPAIN, ²Departament de Bioquímica i Biologia Molecular, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN, ³Bioingenieria, Biomateriales y Nanomedicina (CIBER-BBN), Centro de Investigación Biomédica en Red, Cerdanyola Del Vallès/SPAIN, ⁴School of Computing and Mathematical Sciences, Liverpool John Moores University, Liverpool/UNITED KINGDOM

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10

METRONOMIC TREATMENT IN IMMUNOCOMPETENT PRECLINICAL GL261 GLIOBLASTOMA: EFFECTS OF CYCLOPHOSPHAMIDE AND TEMOZOLOMIDE

L. Ferrer Font¹, N. Arias-Ramos¹, S. Lope-Piedrafita², M. Julià-Sapé³, M. Pumarola¹, C. Arús¹, A.P. Candiota³; ¹Bioquímica i Biología Molecular, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN, ²Servei de Ressonància Magnètica Nuclear, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN, ³Departament de Bioquímica i Biologia Molecular, Centro de Investigación Biomédica en Red / UAB, Cerdanyola Del Vallès/SPAIN, ⁴Departament de Medicina i Cirurgia Animals, Facultat de Veterinària, Universitat Autònoma de Barcelona, Cerdanyola Del Vallès/SPAIN

MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 21, 16:40-17:10

Regional and longitudinal brain metabolic changes in a new transgenic rat model of Alzheimer's disease

M. García-Darás¹, R.V. Simoes², E. Muñoz-Moreno³, R. Tudela⁴, G. Soria³; ¹Master in Biomedical Engineering, University of Barcelona, Barcelona/SPAIN, ²Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona/SPAIN, ³Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona/SPAIN, ⁴Experimental 7T MRI Unit, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona/SPAIN, ⁵GIB-UB, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona/SPAIN

MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 21, 16:40-17:10
522 16:28  Normalization of Brain myo-Inositol Concentration among Morbidly Obese Patients with type 2 Diabetes Treated with Intragastric Balloon

S. Gazdzinski¹, J. Orzeł², A. Gazdzinska³, M. Janewicz⁴, R. Pacho⁵, M. Wylezol⁶; ¹MRI, Military Institute of Aviation Medicine, Warsaw/POLAND, ²Radioelectronics, Warsaw University of Technology, Warsaw/POLAND, ³Obesity and Nutrition, Military Institute of Aviation Medicine, Warsaw/POLAND, ⁴Aviation Training, Military Institute of Aviation Medicine, Warsaw/Poland, ⁵Radiology, Military Institute of Aviation Medicine, Warsaw/Poland, ⁶Surgery, Military Institute of Aviation Medicine, Warsaw/POLAND

MEET THE AUTHOR in the Paper Poster Area on Oct. 21, 16:40-17:10

523 16:30  Identification and Quantification of Hepatic Acid Metabolism in a Lipogenic Methionine/Choline-Deficient Diet-Fed Animal Model with Spin-Spin Relaxation Time by using In vivo Magnetic Resonance Spectroscopy at 9.4 T

K.-H. Song, S.-I. Lim, C.-H. Yoo, M.-Y. Lee, H.-J. Kim, B.-Y. Choe; Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF

MEET THE AUTHOR in the ePoster Area at PC# 17, on Oct. 21, 16:40-17:10

524 16:32  Assessment of cerebral and cardiac metabolic remodeling in a rabbit model of fetal growth restriction by multinuclear HRMAS

R.V. Simoes¹, M.E. Cabañas², C. Loreiro³, M. Illa¹, E. Gratacós¹; ¹Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona Center for Maternal Fetal and Neonatal Medicine, Barcelona/SPAIN, ²Servei de Resonância Magnética Nuclear, Universitat Autònoma de Barcelona, Cerdanyola Del Valles/SPAIN

MEET THE AUTHOR in the ePoster Area at PC# 18, on Oct. 21, 16:40-17:10

525 16:34  Feasibility of the in vivo measurement of acetate metabolism by ¹H-[¹³C] MRS at 14.1T in small areas of the mouse brain

B. Lizarbe¹, H. Lei², R. Gruetter³; ¹Laboratory for Functional and Metabolic Imaging (LIFMET), Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ²Centre d’Imagerie Biomédicale (CIBM), Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ³Laboratory for Functional and Metabolic Imaging (LIFMET), Radiology Department, University of Lausanne and University of Geneva, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND

MEET THE AUTHOR in the ePoster Area at PC# 19, on Oct. 21, 16:40-17:10
Design for a High-Resolution Magic Angle Spinning NMR Rotor Sample-Insert for Quantification of Metabolite Concentrations from Human Tissue Biopsies

A. Damyanovich¹, H. Peemoeller², J.-P. Bissonnette¹, D. Jaffray¹; ¹Medical Physics, Princess Margaret Cancer Center, Toronto/CANADA, ²Physics, University of Waterloo, Waterloo/CANADA

MEET THE AUTHOR in the ePoster Area at PC# 20, on Oct. 21, 16:40-17:10

17:20–18:20 63 Roundtable Discussion
What is the Future of Contrast Agents MRI?
Moderators: A. Radbruch, Heidelberg/DE
Panelists: S. Aime, Turin/IT
A. Rovira, Barcelona/ES
H. Thomsen, Harlev/DK

18:20–18:40 64 Closing and Awards Ceremony
### Abdominal Imaging - Clinical

#### 527 Optimization of cervical cancer tumor volume measurement with MRI

**M. Shorikov**¹, E. Tarachkova², I. Gubskiy³, V. Panov², N. Schimanowsky⁴; ¹Radiology, Russian Cancer Research Center, Moscow/RUSSIAN FEDERATION, ²Radiology, Russian Medical Academy of Continuous Professional Education, Moscow/RUSSIAN FEDERATION, ³Radiology, Russian National Research Medical University named after N.I. Pirogov, Moscow/RUSSIAN FEDERATION, ⁴Pharmacology and radiobiology, Russian National Research Medical University named after N.I. Pirogov, Moscow/RUSSIAN FEDERATION

**MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 20, 15:40-16:10**

#### 528 TARGET FUSION-BIOPSY IN PROSTATE CANCER DIAGNOSTICS

**F. Kossov**¹, V. Panov², B. Karnolov³, I. Abdullin³, **E. Baranova**³, I. Tyurin²; ¹Radiology, RONC for name Blohina, Moscow/RUSSIAN FEDERATION, ²Radiology, Russian Medical Academy of Continuous Professional Education, Moscow/RUSSIAN FEDERATION, ³Urology, European Medical Centre, Moscow/RUSSIAN FEDERATION

**MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 20, 15:40-16:10**

#### 529 Qualitative and quantitative evaluation of image quality of sagittal and axial T2-Weighted Fast Spin-Echo MRI examinations of the Female Pelvis

**S. Al Dahery**, L. Rainford, A. Mcgee; Health Science, UCD, Dublin/IRELAND

**MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 20, 15:40-16:10**

#### 530 MRI as a triage test in prostate cancer diagnostic algorithm in biopsy- naïve men: prospective study

**A. Pavličko**, J. Votrubová; Radiology, Thomayer hospital, Prague/CZECH REPUBLIC

**MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 20, 15:40-16:10**

#### 531 Local recurrence of prostate carcinoma after External-Beam Radiotherapy (EBRT): comparative sensitivities of multiparametric MRI Sequences

**P.P. Arcuri**¹, S. Roccia², D. Laganà³, D. Pingitore⁴, E. Mazzei⁴, G. Fodero¹; ¹Radiology, A.O. Pugliese-De Lellis, Catanzaro/ITALY, ²Centro Medicina Legale, INPS, Catanzaro/ITALY, ³Radiology, Università Magna Graecia, Catanzaro/Italy, ⁴Radioterapy, A.O. Pugliese-De Lellis, Catanzaro/ITALY

**MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 20, 15:40-16:10**

#### 532 Comparison of Reduced field-of-View Diffusion-Weighted Magnetic Resonance Imaging with Conventional Diffusion-Weighted Imaging in cervical cancer

**J. Hwang**, S.S. Hong, H.-J. Kim, Y.-W. Chang; Department of Radiology, Soonchunhyang University College of Medicine, Seoul Hospital, Seoul/KOREA, REPUBLIC OF

**MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 20, 15:40-16:10**
533 Magnetic resonance imaging findings of atypical uterine leiomyomas
A. Er1, G. Pekindil2, M. Gok3, **S. Guneyli**4, A.R. Kandiloglu5, A. Goker6; 1RADIOLOGY, VAN RESEARCH HOSPITAL, Van/TURKEY, 2RADIOLOGY, CELAL BAYAR UNIVERSITY, Manisa/TURKEY, 3RADIOLOGY, ADNAN MENDERS UNIVERSITY, Aydın/TURKEY, 4RADIOLOGY, BULENT ECEVIT UNIVERSITY, Zonguldak/TURKEY, 5PATHOLOGY, CELAL BAYAR UNIVERSITY, Manisa/TURKEY, 6OBSTETRICS, CELAL BAYAR UNIVERSITY, Manisa/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 20, 15:40-16:10

534 Prostate perfusion study: new techniques for acceleration and motion control.
D. Kupriyanov1, L. Araslanova2, E. Demchenko2; 1Imaging Systems, Philips Healthcare, Moscow/RUSSIAN FEDERATION, 2Radiology department, Rostov-on-Don Regional Diagnostic Center, Rostov-On-Don/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 20, 15:40-16:10

535 Evaluation of diffusion-weighted Imaging in the context of multi-parametric MRI of the prostate in the assessment of suspected low volume prostatic carcinoma
I. Papadopoulos1, J. Phillips2, R. Evans2, N. Fenn3, S. Shermer4; 1Physics & Medicine, Swansea University, Swansea/UNITED KINGDOM, 2Medical School, Swansea University, Swansea/UNITED KINGDOM, 3Urology, Morriston Hospital, Swansea/UNITED KINGDOM, 4College of Science, Dept of Physics, Swansea University, Swansea/UNITED KINGDOM
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 20, 15:40-16:10

536 ADVANTAGES OF MR-ENTEROGRAPHY FOR DEFINITION OF THE ACTIVITY IN CROHN’S DISEASE
O. Subbotina, **M. Rezakova**, A. Shevshenko; department of MRI, State Research Institute of Physiology and Fundamental Medicine SB RAMS, Novosibirsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 10, on Oct. 20, 15:40-16:10

537 WITHDRAWN

538 WITHDRAWN

539 Comparison study of synthetic high b value diffusion-weighted images using intravoxel incoherent motion model with acquired high b value diffusion-weighted images in diagnosis of prostate cancer
S.Y. Kim, I.C. Song, J.Y. Cho, S.H. Kim; RADIOLOGY, SEOUL NATIONAL UNIVERSITY HOSPITAL, Seoul/KOREA, REPUBLIC OF
MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 20, 15:40-16:10

540 Saturation Recovery TrueFISP for T1 mapping of sodium signal in the abdomen
A. Ciritsis1, A. Becker1, M. Klarhoefer2, **C. Rossi**3; 1Department of Diagnostic and Interventional Radiology, University Hospital Zürich, Zürich/SWITZERLAND, 2MRI Research, Siemens - Healthcare Switzerland, Zürich/SWITZERLAND
MEET THE AUTHOR in the ePoster Area at PC# 14, on Oct. 20, 15:40-16:10
541 MRI analysis of endobiliary photodynamic therapy (EPDT) effects in Klatskin tumor patients
M. Shorikov¹, M. Lapteva¹, D. Frantsev¹, O. Sergeeva¹, V. Panov², B. Dolgushin¹;
¹Radiological, Research Institute of Clinical and Experimental Radiology, Federal State Institution «N.N.
Blokhin Russian Cancer Research Center», Russian Ministry of Health, Moscow/RUSSIAN FEDERATION,
²Radiology, Russian Medical Academy of Continuous Professional Education, Moscow/RUSSIAN
FEDEATION
MEET THE AUTHOR in the ePoster Area at PC# 15, on Oct. 20, 15:40-16:10

542 MRI analysis of Gd-BOPTA excretion in patients with compromised and non-compromised bile ducts
M. Shorikov¹, P. Polyakov², D. Frantsev¹, O. Sergeeva¹, V. Panov², B. Dolgushin¹;
¹Radiological, Research Institute of Clinical and Experimental Radiology, Federal State Institution «N.N.
Blokhin Russian Cancer Research Center», Russian Ministry of Health, Moscow/RUSSIAN FEDERATION,
²Medical cybernetics, Russian National Research Medical University named after N.I. Pirogov, Moscow/
RUSSIAN FEDERATION. ³Radiology, Russian Medical Academy of Continuous Professional Education,
Moscow/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 16, on Oct. 20, 15:40-16:10

543 Semi-automatic processing of contrast-enhanced magnetic-resonance imaging of kidneys and adrenals in prognosis of efficiency of renal sympathetic denervation in patients with medicamentous-resistant hypertension
N.I. Ryumshina¹, A.E. Baev², P.I. Lukyanenok¹, V.F. Mordovin³, W.Y. Ussov¹; ¹Lab. of
Tomography, Institute of Cardiology, Tomsk/RUSSIAN FEDERATION, ²Department of Interventional
Radiology, Institute of Cardiology, Tomsk/RUSSIAN FEDERATION, ³Department of Arterial Hypertension,
Institute of Cardiology, Tomsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 17, on Oct. 20, 15:40-16:10

Abdominal Imaging - Preclinical

544 Oxygen gas challenge to assess placental hypoperfusion in a rabbit model using T2* measurements
C. Bertholdt¹, M. Dap¹, C. Schaaf², O. Morel¹, M. Beaumont²; ¹IADI, INSERM, Vandoeuvre-Les-
Nancy/FRANCE, ²CIC-IT, CHRU de Nancy, Vandoeuvre-Les-Nancy/FRANCE
MEET THE AUTHOR in the ePoster Area at PC# 18, on Oct. 20, 15:40-16:10

545 MRI investigation of prostate pathology in the PTEN knockout murine model of prostate cancer
G. Serrano De Almeida¹, N. Baxan², C. Bevan¹; ¹Department of Surgery & Cancer, Division
of Cancer, Imperial College London, London/UNITED KINGDOM, ²Biomedical Imaging Centre, Imperial
College London, London/UNITED KINGDOM
MEET THE AUTHOR in the ePoster Area at PC# 19, on Oct. 20, 15:40-16:10
Animal Models
ePosters of this topic can be found in the Lightning Talks Session, page 24-28

Body & MSK
ePosters of this topic can be found in the Lightning Talks Session, page 39-44

Brain and Spine-Clinical Applications
ePosters of this topic can be found in the Lightning Talks Session, page 95-103

Cardiovascular, Breast and Chest Imaging

546 Breast MRI Evaluation of Focal Asymmetric Opacities Seen on Only One Mammographic View
G. Gökalp¹, F. Pektas²; ¹Radiology, Uludag University Medical faculty, Bursa/TURKEY, ²Radiology, Uludag University Medical Faculty, Bursa/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 1, on Oct. 20, 11:20-11:50

547 Preoperative Breast MR Imaging Kinetic Features Using Computer-Aided Diagnosis: Association with Survival Outcome in Invasive Breast Cancer Patients Original Research
S.Y. Nam¹, E.S. Ko²; ¹Radiology, Gil Medical center, Gachon University of Medicine and Science, Incheon/KOREA, REPUBLIC OF, ²Radiology, Samsung Medical Center, Seoul/KOREA, REPUBLIC OF
MEET THE AUTHOR in the ePoster Area at PC# 2, on Oct. 20, 11:20-11:50

548 Can we predict triple negative breast cancer with MR imaging findings?
R. Yılmaz¹, Z. Bayramoglu¹, R.G. Comert¹, Y. Toktas¹, H. Karanlik², N. Cabioglu²; ¹radiology, Istanbul University, Istanbul Faculty of Medicine, Istanbul/TURKEY, ²general surgery, Istanbul University, Istanbul Faculty of Medicine, Istanbul/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 3, on Oct. 20, 11:20-11:50

549 FERUMOXYTOL-ENHANCED MAGNETIC RESONANCE ANGIOGRAPHY (FeMRA) FOR THE ASSESSMENT OF PATIENTS WITH COMPLEX ANATOMY DUE FOR VASCULAR ACCESS CREATION
S. Stoumpos¹, M. Hennessy², A. Vesey³, R. Kasthuri³, A. Radjenovic¹, P. Mark¹, D. Kingsmore³, G. Roditi³; ¹Cardiovascular Research Centre, University of Glasgow, Glasgow/UNITED KINGDOM, ²Radiology, Queen Elizabeth University Hospital, Glasgow/UNITED KINGDOM, ³Renal & Transplant Unit, Queen Elizabeth University Hospital, Glasgow/UNITED KINGDOM
MEET THE AUTHOR in the ePoster Area at PC# 4, on Oct. 20, 11:20-11:50

550 The contribution of magnetic resonance imaging in the diagnosis of clinically unclear traumatic fat necrosis
R. Yilmaz, R.G. Comert; radiology, Istanbul University, Istanbul Faculty of Medicine, Istanbul/TURKEY
MEET THE AUTHOR in the ePoster Area at PC# 5, on Oct. 20, 11:20-11:50
551 Automatic Propagation of Left Ventricular Endocardial Boundary Segmentation in Time-Resolved 3D Cardiac MR
G. Belsley1, J. Tourais2, M. Breeuwer2; 1Dept. of Biomedical Engineering, Eindhoven University of Technology, Eindhoven/NETHERLANDS, 2Clinical Science, Philips Healthcare, Best/NETHERLANDS
MEET THE AUTHOR in the ePoster Area at PC# 6, on Oct. 20, 11:20-11:50

552 Influence of motion artifact in myocardial 1H-MR Spectroscopy
Y. Tajima1, M. Hirano1, H. Katsuyama1, J. Shoji1, K. Murata1, K. Saito1, K. Tokuuye1, T. Kaji2, Y. Ichiba2, Y. Komori3; 1Tokyo medical university, Tokyo medical university, Tokyo/JAPAN, 2Department of Application Service, Siemens healthcare K.K., Tokyo/JAPAN, 3Diagnostic imaging business area DI research & collaboration, Siemens healthcare K.K., Tokyo/JAPAN
MEET THE AUTHOR in the ePoster Area at PC# 7, on Oct. 20, 11:20-11:50

553 DIAGNOSTIC AND PROGNOSTIC VALUE OF CARDIOVASCULAR MAGNETIC RESONANCE IMAGING IN DILATED CARDIOMYOPATHY
S. Mehra, N. Singla; RADIO DiAGNOSIS, PGIMER DR RAM MANOHAR LOHIA HOSPITAL, New Delhi/INDIA
MEET THE AUTHOR in the ePoster Area at PC# 8, on Oct. 20, 11:20-11:50

554 Impact of pulmonary artery banding on right ventricular function in magnetic resonance imaging: An animal study.
H. Guffler1, S. Niefeldt2, S. Wagner2, C. Yerebakan2; 1Radiology, Martin-Luther University Halle-Wittenberg, Halle (Saale)/GERMANY, 2Cardiac Surgery, University Medical Center, Rostock/GERMANY, 3Neuroradiology, Friedrich Schiller University, Jena/GERMANY
MEET THE AUTHOR in the ePoster Area at PC# 9, on Oct. 20, 11:20-11:50

555 WITHDRAWN

556 Towards simulation of 3D Phase Contrast imaging of kidney vasculatures
A. Klepaczko1, P. Szczypiński1, M. Strzelecki1, L. Stefańczyk2; 1Institute of Electronics, Lodz University of Technology, Lodz/POLAND, 2Department of Diagnostic Imaging, Medical University of Lodz, Łódź/POLAND
MEET THE AUTHOR in the ePoster Area at PC# 11, on Oct. 20, 11:20-11:50

557 Application of non-contrast MR-venography for the evaluation of blood flow in patients with varicose of pelvic veins
K. Sevostyanova1, A. Chupakhin2, A. Tulupov3; 1Laboratory of Invasive Medical Technologies, Institute of Chemical Biology and Fundamental Medicine SB RAS, Novosibirsk/RUSSIAN FEDERATION, 2Laboratory of differential equations, Lavrentyev Institute of Hydrodynamics SB RAS, Novosibirsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC# 12, on Oct. 20, 11:20-11:50

558 Flow sensitization in an inhomogeneous excitation field - MR Fingerprinting approach
L. Nuñez Gonzalez1, D. Papp2, G. Kotek1, J.A. Hernandez-Tamames1; 1Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS, 2Department of physics, ELTE, Budapest/HUNGARY
MEET THE AUTHOR in the ePoster Area at PC# 13, on Oct. 20, 11:20-11:50
Diffusion and fMRI

ePosters of this topic can be found in the Lightning Talks Session, page 53-58

Diffusion Weighted Imaging

559 WITHDRAWN

560 About the dependence of Gaussian diffusion and Kurtosis parameters on SNR in prostate DWIs
M.G. Di Trani¹, S. Monti², C. Cavaliere², M. Aiello², S. Capuani¹; ¹Physics, CNR ISC UOS, Sapienza University of Rome, Rome/ITALY, ²SDN, IRCCS, Naples/ITALY
MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 19, 11:45-12:15

561 Evaluate the value of DWI sequence in identifying benign and malignant lesion of cervix in comparison with contrast-enhanced method
O. Seraydarmansour, G. Jafarinosar; MRI, DR. Athari Imaging Center, Tehran/IRAN
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 19, 11:45-12:15

562 Diffusion MRI to assess the cerebral activation response to fasting status in a glioblastoma mouse model
I. Guadilla, M.J. Guillén, S. Cerdán García-Esteller, P. López-Larrubia; Department of Experimental Models of Human Disease, Instituto de Investigaciones Biomédicas “Alberto Sols” CSIC-UAM, Madrid/SPAIN
MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 19, 11:45-12:15

563 Does hypertension affect the aging of white matter? - insights from DTI.
A. Sabisz¹, P. Naumczyk², M. Witkowska², B. Graff³, K. Jodzio², D. Gasecki³, A. Konarzewska³, J. Kwela⁴, E. Szurowska¹, K. Narkiewicz³; ¹Second Department of Radiology, Medical University of Gdansk, Gdansk/Poland, ²Institute of Psychology, University of Gdansk, Gdansk/Poland, ³Department of Hypertension and Diabetology, Medical University of Gdansk, Gdansk/Poland, ⁴Department of Hypertension and Diabetology, e Department of Neurology of Adults, Medical University of Gdansk, Gdansk/Poland, ⁵Institute of Experimental Physics, University of Gdansk, Gdansk/Poland
MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 19, 11:45-12:15

564 Monoexponential and biexponential fitting in DWI analysis for prediction of the liver fibrosis
E. Zawada¹, G. Rusak¹, M. Moroz², Z. Serafin¹; ¹Radiology and Diagnostic Imagine, University Hospital No.1, Bydgoszcz/Poland, ²Faculty of Health Sciences, Collegium Medicum UMK, Bydgoszcz/Poland
MEET THE AUTHOR in the ePoster Area at PC#6, on Oct. 19, 11:45-12:15
Don't move! Motion Artefacts and Quality Control

565 Geometric accuracy of the MR imaging techniques in the presence of respiratory motion
T. Torfeh, R. Hammoud, T. El Kaissi, M. Mcgarry, S. Aouadi, N. Al Hammadi; Radiation Oncology, National Center for Cancer Care & Research (NCCCR), Doha/QATAR

MEET THE AUTHOR in the ePoster Area at PC#1, on Oct. 19, 12:15-12:45

566 Wavelet entropy: quantifying small-scale head motion artifacts
H. Mattern, A. Scairra, O. Speck; Biomedical Magnetic Resonance, Otto-von-Guericke-Universität Magdeburg, Magdeburg/GERMANY

MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 19, 12:15-12:45

567 Improving Robustness of Motion Correction in 3D GRASE PROPELLER Arterial Spin Labeling
J. Huber, M. Günther, M. Vicari; MR-Physics, Fraunhofer MEVIS, Bremen/GERMANY

MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 19, 12:15-12:45

568 Measuring gradient nonlinearity using field probe array
Y.-H. Chu1, Y.-C. Hsu1, F.-H. Lin2, M. Zaitsev1; 1University Medical Center University of Freiburg, Faculty of Medicine, University of Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY, 2Institute of Biomedical Engineering, National Taiwan University, Taipei/TAIWAN

MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 19, 12:15-12:45

569 Susceptibility effect comparison using a MRI depth electrode phantom
S. Solis1, R. Martin1, F. Vazquez1, O. Marrulo2, A. Rodriguez2; 1Department of Physics, Faculty of Sciences, UNAM, Mexico City/MEXICO, 2Department of Neuroimage, INNN MVS, Mexico City/MEXICO

MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 19, 12:15-12:45

570 Correcting pre-emphasis artifacts in interleaved spiral imaging
Y.-C. Hsu1, Y.-H. Chu1, M. Zaitsev1, F.-H. Lin2; 1University Medical Center University of Freiburg, Faculty of Medicine, University of Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY, 2Institute of Biomedical Engineering, National Taiwan University, Taipei/TAIWAN

MEET THE AUTHOR in the ePoster Area at PC#6, on Oct. 19, 12:15-12:45

fMRI

571 Toward WM CBF dynamics characterization during fMRI
L. Greco, O. Reynaud; CIBM, EPFL, Lausanne/SWITZERLAND

MEET THE AUTHOR in the ePoster Area at PC#1, on Oct. 19, 16:00-16:30

572 Differential Hemispheric Brain Network Reorganization in two profiles of High IQ Children: a resting-state fMRI study
I. Suprano1, C. Delon-Martin2, G. Kocevar1, C. Stamile1, O. Revol2, F. Nusbaum4, D. Sappey-Marinier1; 1CREATIS, Université Claude Bernard Lyon1, Villeurbanne/FRANCE, 2Grenoble Institut des Neurosciences (GIN) U 1216, Université Grenoble Alpe, La Tranche/FRANCE, 3Hôpital Neurologique, HCL, Bron/FRANCE, 4Laboratoire P2S & Centre Psyrene, Université Claude Bernard Lyon 1, Lyon/FRANCE

MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 19, 16:00-16:30
Image Reconstruction and Processing

573 SENSE Implementation on Graphical Processing Unit (GPU) using LU Decomposition
I. Ullah, M. Ammar, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 19, 16:00-16:30

574 Multiframe Denoising in Magnetic Resonance Imaging
P. Liebig¹, R. Heidemann², B. Hensel¹, D. Porter³; ¹Max Schaldach-Stiftungsprofessur für Biomedizinische Technik, Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen/GERMANY, ²HC MR TR, Siemens Healthcare, Erlangen/GERMANY, ³MEVIS, Fraunhofer, Bremen/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 19, 16:00-16:30

575 Accelerating GRAPPA Operator Gridding (GROG) for L+S GRASP Reconstruction using GPU
S. Qazi¹, I. Shahzadi¹, I. Aslam², H. Omer²; ¹Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, ²Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN
MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 19, 16:00-16:30

576 Motion Compensated 5D Free-Breathing Whole-Heart Isotropic CINE MRI. An approach based on elastic groupwise registration to promote sparsity
R.M. Menchón-Lara¹, J. Royuela-Del-Val¹, A. Godino-Moya¹, L. Cordero-Grande², F. Simmross-Wattenberg¹, M. Martín-Fernández¹, C. Alberola-López¹; ¹Image Processing Lab, University of Valladolid, Valladolid/SPAIN, ²Department of Biomedical Engineering, King’s College London, London/UNITED KINGDOM
MEET THE AUTHOR in the ePoster Area at PC#6, on Oct. 19, 16:00-16:30

577 L+S Reconstruction of Cardiac MRI with Different Sparsifying Transforms
A. Fatima, S. Qazi, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN
MEET THE AUTHOR in the ePoster Area at PC#7, on Oct. 19, 16:00-16:30

578 Through-Slice Super Resolution Reconstruction of Human Brain MRI
N.C. Askin¹, A. Klauser¹, B. Bejar Haro², M. Kocher³, F. Lazeyras¹; ¹Department of Radiology and Medical Informatics, University of Geneva, Geneva/SWITZERLAND, ²School of Computer and Communication Sciences, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND, ³Biomedical Imaging Group, Ecole Polytechnique Fédérale de Lausanne, Lausanne/SWITZERLAND
MEET THE AUTHOR in the ePoster Area at PC#8, on Oct. 19, 16:00-16:30
Interventional MRI

579 Position determination of biopsy needles in interventional MRI using spin echo images with inverted read out gradients
J.W. Krug, M. Goerlitz, M. Frieb; Department of Electrical Engineering and Information Technology, Otto-von-Guericke-University Magdeburg, Magdeburg/GERMANY

MEET THE AUTHOR in the ePoster Area at PC#9, on Oct. 19, 16:00-16:30

580 Effect of respiration on the quality of MR thermometry in the head
G. Salim¹, P. Baron¹, D.H.J. Poot¹, J.A. Hernandez-Tamames¹, M.m. Paulides², S. Klein³; ¹Radiology and Nuclear Medicine, Erasmus Medical Center, Rotterdam/NETHERLANDS, ²Radiation Oncology, Erasmus MC Cancer Institute, Rotterdam/NETHERLANDS, ³Biomedical Imaging Group Rotterdam, Departments of Radiology & Nuclear Medicine and of Medical Informatics, Erasmus MC, Rotterdam/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC#10, on Oct. 19, 16:00-16:30

Hardware and Safety Contrasts
ePosters of this topic can be found in the Lightning Talks Session, page 65-69

MR Spectroscopy Methods and Applications
ePosters of this topic can be found in the Lightning Talks Session, page 105-111

Musculoskeletal Imaging

581 WITHDRAWN

582 Evaluating T2 relaxation times in muscular dystrophy patients; which fitting model to choose, Tri-exponential or Extended Phase Graph?
J. Van Asten, L. Heskamp, A. Heerschap; Radiology and Nuclear Medicine, Radboud University Medical Center, Nijmegen/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC#15, on Oct. 20, 11:20-11:50

583 View-ordering Schemes for Parallel-Imaging Variable Flip Angle 3D-GRASE in High-Resolution Knee Imaging
A. Cristobal-Huerta¹, D.H.J. Poot¹, M.W. Vogel², J.A. Hernandez-Tamames¹; ¹Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS, ²ASL Scientists Europe, GE Healthcare, Hoevelaken/NETHERLANDS

MEET THE AUTHOR in the ePoster Area at PC#16, on Oct. 20, 11:20-11:50

584 3D MRI Segmentation of muscle through 2D multi-label propagation at 7T
A. Ogier¹, A. Fouré¹, M. Sdika², A. Le Troter¹, D. Bendahan¹; ¹CRMBM, UMR CNRS 7339, Aix-Marseille Université, Marseille/FRANCE, ²1, UJM-Saint Etienne, CNRS, Inserm, CREATIS UMR 5220,, Univ. Lyon, INSA-Lyon, Université Claude Bernard Lyon 1, Lyon/FRANCE

MEET THE AUTHOR in the ePoster Area at PC#17, on Oct. 20, 11:20-11:50
Neuroimaging - Clinical

585 Previous antidepressant treatment is associated with increased brain connections in depressed patients: a case control study
M.N.T.K. Tran Dong¹, R. Colle², S. Hanadi¹, S. Rotenberg², F. Gressier², J.-F. Costemale-Lacoste², A. Rigal², L. Beccquemont³, E. Corruble², D. Ducreux²; ¹IR4M (UMR8081,CNRS), Saclay University - Paris Sud University, Orsay/FRANCE, ²Psychiatry, Bicêtre hospital, Le Kremlin Bicêtre/FRANCE, ³Nephrology, Bicêtre hospital, Le Kremlin Bicêtre/FRANCE
MEET THE AUTHOR in the ePoster Area at PC#1, on Oct. 19, 16:30-17:00

586 How accurate are 84 second whole spine scouts from a lumbar MRI in detecting lumbar and, additional thoracic spine fractures? Interdisciplinary preliminary study of patients over 65 years of age.
M. Kaniewska¹, A.J.M. De Beus², A. Mameghani², F. Ahlhelm¹, R.A. Kubik-Huch¹, S.E. Anderson¹; ¹Radiology, Kantonsspital Baden, Baden/SWITZERLAND, ²Orthopedic Surgery, Kantonsspital Baden, Baden/SWITZERLAND
MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 19, 16:30-17:00

587 Multi-parametric characterization of squamous cell carcinoma (SCC) of the head and neck using combined ¹⁸F-FDG-PET/MRI
J. Weiss¹, K. Zwirner², D. Thorwarth², R. Winter², D. Zips², C. La Fougère³, C. Pfannenberg¹, K. Nikolau¹, S. Gatidis¹; ¹Diagnostic and Interventional Radiology, University of Tuebingen, Tuebingen/GERMANY, ²Radiation Oncology, University of Tuebingen, Tuebingen/GERMANY, ³Nuclear Medicine, University of Tuebingen, Tuebingen/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 19, 16:30-17:00

588 Influence of Psychotropic Drugs Consumption on Brain Connectivity in First Episode Psychosis
M. Tavares¹, S. Reimão², I. Chendo³, R.G. Nunes⁴; ¹Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Lisbon/PORTUGAL, ²Neurological Imaging Department, Hospital de Santa Maria - Centro Hospitalar Lisboa Norte, Lisbon/PORTUGAL, ³Psychiatry Department, Hospital de Santa Maria - Centro Hospitalar Lisboa Norte, Lisbon/PORTUGAL, ⁴Institute for Systems and Robotics and Department of Bioengineering, Instituto Superior Técnico, Lisbon/PORTUGAL
MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 19, 16:30-17:00

589 MR tractography of the brachial plexus
I. Ibrahim¹, J. Tintera¹, A. Skoch¹, V. Herynek¹, I. Humhej², M. Hajek¹; ¹Department of Diagnostic and Interventional Radiology, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, ²Department of Neurosurgery, Masaryk Hospital, Ústí Nad Labem/CZECH REPUBLIC
MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 19, 16:30-17:00
590 Differences of functional activity in sensory-motor networks at rest in children with attention deficit hyperactivity disorder
Ş. Gengeç Benli1, S. İçer1, S. Özmen2; 1Engineering Faculty, Biomedical Engineering, Erciyes University, Kayseri/TURKEY, 2Department of Child and Adolescent Mental Health and Diseases, Erciyes University, Kayseri/TURKEY
MEET THE AUTHOR in the ePoster Area at PC#6, on Oct. 19, 16:30-17:00

591 The white matter structure analysis in patients with fragile X syndrome
A. Tulupov1, A. Antonov2, E. Isanova2, A. Savelov3, A. Chupakhin1, D. Yudkin4; 1Laboratory of differential equations, Lavrentyev Institute of Hydrodynamics SB RAS, Novosibirsk/RUSSIAN FEDERATION, 2Institute of Medicine and Psychology, Novosibirsk State University, Novosibirsk/RUSSIAN FEDERATION, 3Laboratory «MRT TECHNOLOGIES», The Institute International Tomography Center of the Russian Academy of Sciences, Novosibirsk/RUSSIAN FEDERATION, 4Chromosome pathology group, Institute of Molecular and Cellular Biology SB RAS, Novosibirsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC#7, on Oct. 19, 16:30-17:00

592 Cerebral reorganization after brain metastases treated by stereotactic radiosurgery: multiparametric functional and metabolic 3 Tesla MR approach to assess the long term course.
S. Wagner1, G. Eichner2, H. Guffler3; 1Neuroradiology, Friedrich-Schiller University, Jena/GERMANY, 2Mathematical Institute, Justus-Liebig University, Giessen/GERMANY, 3Radiology, Martin-Luther University Halle-Wittenberg, Halle (Saale)/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#8, on Oct. 19, 16:30-17:00

593 Can Arterial-Spin-Labelling Metrics Serve as Imaging-Biomarkers For Isocitrate-Dehydrogenase (IDH)-Mutation in Gliomas?
A. Alsaedi1, A. Melbourne2, J.-M. Hempel3, X. Golay1, S. Bisdas1; 1Brain Repair & Rehabilitation, Institute of Neurology, University College London, London/UNITED KINGDOM, 2Medical Physics & Biomedical Engineering, Medical Physics & Biomedical Engineering, London/UNITED KINGDOM, 3Department of Neuroradiology, Eberhard Karls University, Tubingen/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#9, on Oct. 19, 16:30-17:00

594 WITHDRAWN

595 Magnetic resonance perfusion in assessment of the early morphofunctional changes of the central nervous system caused by demyelinating disease
A. Tulupov1, L. Vasilikv2, E. Isanovav3, A. Chupakhin1; 1Laboratory of differential equations, Lavrentyev Institute of Hydrodynamics SB RAS, Novosibirsk/RUSSIAN FEDERATION, 2Laboratory «MRT TECHNOLOGIES», The Institute International Tomography Center of the Russian Academy of Sciences, Novosibirsk/RUSSIAN FEDERATION, 3Institute of Medicine and Psychology, Novosibirsk State University, Novosibirsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC#11, on Oct. 19, 16:30-17:00

596 Functional magnetic resonance imaging with seed- based analysis as a diagnostic tool for fragile x syndrome
A. Tulupov1, Y. Rymareva2, A. Antonov2, E. Isanova2, A. Savelov3, A. Chupakhin1, D. Yudkin4; 1Laboratory of differential equations, Lavrentyev Institute of Hydrodynamics SB RAS, Novosibirsk/RUSSIAN FEDERATION, 2Institute of Medicine and Psychology, Novosibirsk State University, Novosibirsk/RUSSIAN FEDERATION, 3Laboratory «MRT TECHNOLOGIES», The Institute International Tomography Center of the Russian Academy of Sciences, Novosibirsk/RUSSIAN FEDERATION, 4Chromosome pathology group, Institute of Molecular and Cellular Biology SB RAS, Novosibirsk/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC#12, on Oct. 19, 16:30-17:00
Neuroimaging - Preclinical

598 Effect of fractionated irradiation on the rat brain: 1H MRS study at 7T
P. Hnilicová¹, S. Bálintová², D. Kalenská³, E. Hajtmanová⁴, P. Murín⁴, M. Bittšanský¹, D. Dobrota³, J. Lehotský¹, M. Adamkov²; ¹Division of Neurosciences at Biomedical Center Martin, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Martin/SLOVAK REPUBLIC, ²Institute of Histology and Embryology, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Martin/SLOVAK REPUBLIC, ³Department of Biochemistry, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Martin/SLOVAK REPUBLIC, ⁴Department of Radiotherapy and Oncology, University Hospital Martin, Martin/SLOVAK REPUBLIC
MEET THE AUTHOR in the ePoster Area at PC#7, on Oct. 19, 12:15-12:45

599 Magnetization Transfer Ratio in brain bottom areas of non-human primates development
M. Nishio¹, Y. Komaki², F. Seki³, J. Hata⁴, A. Uematsu³, E. Sasaki⁵, H. Okano³, A. Furukawa¹; ¹Graduate School of Human Health Sciences, Tokyo Metropolitan University, Tokyo/JAPAN, ²Live Imaging Center, Central Institute for Experimental Animals (CIEA), Kawasaki/JAPAN, ³Department of Physiology, School of Medicine Keio University, Tokyo/JAPAN, ⁴Brain Science Institute, RIKEN, Saitama/JAPAN, ⁵Marmoset Research Department, Central Institute for Experimental Animals (CIEA), Kawasaki/JAPAN
MEET THE AUTHOR in the ePoster Area at PC#8, on Oct. 19, 12:15-12:45

600 “Magnetic resonane imaging of demyelinating processes in the cuprizone model - quantitative analysis in mouse brain ex vivo”
K. Korga, W. Węglarz, K. Kalita, K. Jasiński, W. Pliędzia; Department of Magnetic Resonance Imaging, Institute of Nuclear Physics, Polish Academy of Sciences, Kraków/POLAND
MEET THE AUTHOR in the ePoster Area at PC#9, on Oct. 19, 12:15-12:45

601 Susceptibility artefact determination of pigeon skulls (Columbia livia)
D. Flores¹, S. Solis², R. Martin², F. Vazquez², O. Marrufo³, A. Rodriguez¹; ¹Department of Electrical Engineering, UAM Iztapalapa, Mexico City/MEXICO, ²Department of Physics, Faculty of Sciences, UNAM, Mexico City/MEXICO, ³Department of Neuroimage, INNN MVS, Mexico City/MEXICO
MEET THE AUTHOR in the ePoster Area at PC#10, on Oct. 19, 12:15-12:45
602 Maturational trajectories of cortical brain development in common marmoset

F. Seki¹, K. Hikishima², Y. Komaki³, J. Hata⁴, A. Uematsu¹, E. Sasaki⁶, H. Okano⁶;
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MEET THE AUTHOR in the ePoster Area at PC#11, on Oct. 19, 12:15-12:45

603 Anesthesia influence in magnetic susceptibility dependent MRI studies

D. Calle¹, I. Guadilla², S. Cerdán García-Esteller², P. López-Larrubia²; ¹Department of Experimental Models of Human Disease, Instituto de Investigaciones Biomédicas “Alberto Sols” - CSIC/UAM, Madrid/SPAIN, ²Department of Experimental Models of Human Disease, Instituto de Investigaciones Biomédicas Alberto Sols, Madrid/SPAIN

MEET THE AUTHOR in the ePoster Area at PC#12, on Oct. 19, 12:15-12:45

604 Functional diffusion MRI in an animal model of paclitaxel induced-peripheral neuropathy

R.M. Oliveira¹, I. Tavares², P. López-Larrubia¹; ¹Instituto de Investigaciones Biomédicas, CSIC-UAM, Madrid/SPAIN, ²Department of Experimental Biology, Faculdade de Medicina do Porto, Porto/PORTUGAL

MEET THE AUTHOR in the ePoster Area at PC#13, on Oct. 19, 12:15-12:45

605 Difference of the MRI properties and connectome between living and postmortem brain

Y. Haga¹, J. Hata², A. Uematsu³, Y. Komaki⁴, F. Seki³, M. Nishio¹, N. Kishi⁵, E. Sasaki⁶, H. Okano⁶, A. Furukawa¹; ¹Graduate School of Human Health Sciences, Tokyo Metropolitan University, Tokyo/JAPAN, ²Brain Science Institute, RIKEN, Saitama/JAPAN, ³Department of Physiology, Keio University, School of Medicine, Tokyo/JAPAN, ⁴Live Imaging Center, Central Institute for Experimental Animals (CIEA), Kawasaki/JAPAN, ⁵Department of Physiology, School of Medicine Keio University, Tokyo/JAPAN, ⁶Marmoset Research Department, Central Institute for Experimental Animals (CIEA), Kawasaki/JAPAN

MEET THE AUTHOR in the ePoster Area at PC#14, on Oct. 19, 12:15-12:45

New Contrasts

606 Mn(II)-dimercaptosuccinate (Mn-DMSA) in vivo studies as possible tumor-imaging paramagnetic agent

W.Y. Ussov¹, M.L. Belyanin², A.I. Bezlepkin¹, N.L. Shimanovsky³, V.D. Fillimono²; ¹Lab. of Tomography, Institute of Cardiology, Tomsk/RUSSIAN FEDERATION, ²Organic chemistry and biotechnology, National Research Tomsk Polytechnic University, Tomsk/RUSSIAN FEDERATION, ³Molecular Pharmacology, National Research N.I.Pirogov Medical University, Moscow/RUSSIAN FEDERATION

MEET THE AUTHOR in the ePoster Area at PC#7, on Oct. 19, 11:45-12:15

607 High relaxivity macrocyclic paramagnetic agents for MRI

A. Fringuello Mingo¹, S. Colombo Serra¹, S. Baroni², C. Cabella¹, R. Napolitano¹; I. Hawala², L. Lattuada¹, F. Tedoldi³, S. Aime³; ¹GI&TO, Bracco Imaging Spa, Colleretto Giacosa/ITALY, ²Dipartimento di Biotecnologie Molecolari e Scienze per la salute, Università degli Studi di Torino, Torino/ITALY, ³Dipartimento di Chimica I.F.M., Università degli Studi di Torino, Torino/ITALY

MEET THE AUTHOR in the ePoster Area at PC#8, on Oct. 19, 11:45-12:15
608 Use of Shear Wave Mode Data in Elasticity Inversion in MR Elastography
C. Ariyurek¹, S. Ozdemir¹, B. Tasdelen², A.S. Ergun³, Y.Z. Ider², E. Atalar¹; ¹National Magnetic Resonance Research Center (UMRAM), Bilkent University, Ankara/TURKEY, ²Department of Electrical and Electronics Engineering, Bilkent University, Ankara/TURKEY, ³Department of Electrical and Electronics Engineering, TOBB-University of Economics and Technology, Ankara/TURKEY
MEET THE AUTHOR in the ePoster Area at PC#9, on Oct. 19, 11:45-12:15

609 Susceptibility determination using a portable 0.55T small-bore MRI system
J.W. Krug¹, M. Goerlitz², M. Friebe¹; ¹Department of Electrical Engineering and Information Technology, Otto-von-Guericke-University Magdeburg, Magdeburg/GERMANY, ²Department of Electrical Engineering and Information Technology, Otto-von-Guericke Universität Magdeburg, Magdeburg/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#10, on Oct. 19, 11:45-12:15

Novel Hardware and Sequences

610 A Feasibility Study of Simultaneous Transmission Method with Multiple Volume Coil for Enhancing $|B_1|$ Homogeneity
H. Song, H.-J. Kim, P. Heo, D. Kim, K.-N. Kim; Gachon Advanced Institute for health Sciences and Technology, Gachon University, Incheon/KOREA, REPUBLIC OF
MEET THE AUTHOR in the ePoster Area at PC#14, on Oct. 19, 16:30-17:00

611 Failure prevention and detection of superconductive MRI cooling systems using vibration sensors
J.W. Krug, J. Beyer, A. Illanes, M. Friebe; Department of Electrical Engineering and Information Technology, Otto-von-Guericke-University Magdeburg, Magdeburg/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#15, on Oct. 19, 16:30-17:00

612 An actively decoupled, double-tuned, receive only RF coil design.
Y. Ha, C.-H. Choi, N.J. Shah; Institute of Neuroscience and Medicine - 4, Forschungszentrum Juelich, Juelich/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#16, on Oct. 19, 16:30-17:00

613 Optimizing 2D RF Pulse Design for $B_0$ Field Strength for Reduced-FOV Imaging
O.C. Eren¹, E.U. Saritas²; ¹Department of Electrical and Electronics Engineering, Bilkent University, Ankara/TURKEY, ²Department of Electrical and Electronics Engineering and National Magnetic Resonance Research Center (UMRAM), Bilkent University, Ankara/TURKEY
MEET THE AUTHOR in the ePoster Area at PC#17, on Oct. 19, 16:30-17:00

614 Experimental validation of an ultimate signal-to-noise ratio for a circular coil
E. Lopez¹, S. Solis¹, R. Martin¹, F. Vazquez¹, O. Marrufo², A. Rodriguez³; ¹Department of Physics, Faculty of Sciences, UNAM, Mexico City/MEXICO, ²Department of Neuroimage, INNN MVS, Mexico City/MEXICO, ³Department of Electrical Engineering, UAM Iztapalapa, Mexico City/MEXICO
MEET THE AUTHOR in the ePoster Area at PC#18, on Oct. 19, 16:30-17:00
615 Theoretical study of SNRSENSE for a slotted coil array
S. Solis1, R. Martín1, F. Vazquez1, O. Marrufo2, A. Rodríguez3; 1Department of Physics, Faculty of Sciences, UNAM, Mexico City/MEXICO, 2Department of Neuroimage, INNN MVS, Mexico City/MEXICO, 3Department of Electrical Engineering, UAM Iztapalapa, Mexico City/MEXICO
MEET THE AUTHOR in the ePoster Area at PC#19, on Oct. 19, 16:30-17:00

616 Relationship between signal enhancement with dipolar technique and viscoelasticity of tissues containing macromolecules
E. Mougel, P.M. Lefebvre, K. Tse Ve Koon, D. Grenier; CREATIS, Univ. Lyon ; CNRS UMR 5220 ; INSERM U1206 ; INSA-Lyon ; UJM-Saint Etienne ; Université Lyon1, Villeurbanne/FRANCE
MEET THE AUTHOR in the ePoster Area at PC#20, on Oct. 19, 16:30-17:00

Peaks and Valleys - MR Spectroscopy

617 Comparison of DCE-MRI and hyperpolarized 13C-MRSI in cancer canine patients
C. Eschen1, P. Holst2, M. Lundemann Jensen1, H. Bo Wiberg Larsson1, A. Kjær1, J. Henrik Ardenkjær-Larsen2, A. T. Kristensen2, A. Espe Hansen1; 1Department of Clinical Physiology; Nuclear Medicine & PET and Cluster for Molecular Imaging, Rigshospitalet, Copenhagen/DENMARK, 2Department of Veterinary Clinical Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Frederiksberg C/DENMARK, 3Department of Electrical Engineering, Technical University of Denmark, Kgs. Lyngby/DENMARK
MEET THE AUTHOR in the ePoster Area at PC#1, on Oct. 20, 16:10-16:40

618 Metabolic alterations in a depression-like rat model of chronic forced swimming stress: In vivo proton magnetic resonance spectroscopy study at 7T
C.-H. Yoo1, K.-H. Song1, S.-I. Lim1, H.-J. Kim1, D.-C. Woo2, B.-Y. Choe1; 1Department of Biomedical Engineering, The Catholic University of Korea, Seoul/KOREA, REPUBLIC OF, 2Asan Institute for Life Sciences, Asan Medical Center, Seoul/KOREA, REPUBLIC OF
MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 20, 16:10-16:40

619 SNR optimization of human brain 31P MR spectra in vivo at 3 Tesla
A. Manzhurtsev1, O. Bozhko2, T. Akhadov3, N. Semenova4; 1504, N.M. Emanuel Institute of Biochemical Physics of the Russian Academy of Sciences, Moscow/RUSSIAN FEDERATION, 2Radiology, Research Institute of Children Emergency Surgery and Traumatology, Moscow/Russian Federation, 3Radiology, Clinical and Research Institute of Emergency Children’s Surgery and Trauma, Moscow/ RUSSIAN FEDERATION, 4Dynamic of Chemical and Biological Processes, Semenov Institute of Chemical Physics of RAS (ICP RAS), Moscow/ RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 20, 16:10-16:40

620 Development of a Standardization Phantom for Measuring Brain Gamma-aminobutyric acid (GABA).
D. Harasym1, N. Simard1, A. Santos Diaz1, A. Nelson2, M. Noseworthy1; 1School of Biomedical Engineering, McMaster University, Hamilton/CANADA, 2Kinesiology, McMaster University, Hamilton/ CANADA
MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 20, 16:10-16:40
621 Brown Adipose Tissue Evaluation in Supraclavicular Fat Depot in Patients with Diabetes Mellitus Type 2 using MR-spectroscopy
D. Ustyuzhanin¹, M. Shariya¹, E. Koksharova², A. Mayorov², M. Shestakova², S. Ternovoy²;
¹Tomography Department, Cardiology Research Center, Moscow/RUSSIAN FEDERATION, ²Endocrinology Department, Endocrinology Research Center, Moscow/RUSSIAN FEDERATION, ³Radiology Chair, Sechenov First Moscow State Medical University, Moscow/RUSSIAN FEDERATION
MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 20, 16:10-16:40

622 Altered white matter structural brain network in patients with subjective cognitive decline and mild cognitive impairment
X. Xu¹, J.S. Kwan², H.K. Mak¹, A. Wong³, C.T.V. Mok³, E.S. Hui¹; ¹Department of Diagnostic Radiology, The University of Hong Kong, Hong Kong/CHINA, ²Department of Medicine, The University of Hong Kong, Hong Kong/CHINA, ³Department of Medicine & Therapeutics, The Chinese University of Hong Kong, Hong Kong/CHINA
MEET THE AUTHOR in the ePoster Area at PC#6, on Oct. 20, 16:10-16:40

623 Quantitative Identification of Magnetic Field Inhomogeneities Over Time Due to Physiological Disturbances in the Spinal Cord for MRS Approaches
N. Simard; School of Biomedical Engineering, McMaster University, Hamilton/CANADA
MEET THE AUTHOR in the ePoster Area at PC#7, on Oct. 20, 16:10-16:40

624 Neurochemical modulations in Systemic Lupus Erythematosus with and without neuropsychiatric symptoms by 1H-MR spectroscopy at 3T
S. Cuellar Baena¹, J. Nystedt², A. Jönsen³, P. Nilsson³, J. Lätt⁴, P. Sundgren¹; ¹Institution of Clinical Sciences, Department of Radiology, Lund University, Lund/SWEDEN, ²Department of Neurology, Lund University, Lund/SWEDEN, ³Department of Reumatology, Lund University, Lund/SWEDEN, ⁴Center for Imaging and Function, Skåne University Hospital, Lund/SWEDEN
MEET THE AUTHOR in the ePoster Area at PC#8, on Oct. 20, 16:10-16:40
Rise of the machines

625 Feature selection improves prediction of overall survival from baseline MRI in patients with glioblastoma multiforme
M. Ingrisch¹, M.J. Schneider¹, A. Mittermeier¹, C. Pirkl¹, B. Ertl-Wagner²; ¹Josef Lissner Laboratory for Biomedical Imaging, Institute for Clinical Radiology, Ludwig-Maximilians-University Hospital Munich, Munich/GERMANY, ²Institute for Clinical Radiology, Ludwig-Maximilians-University Hospital, Munich/GERMANY
MEET THE AUTHOR in the ePoster Area at PC#9, on Oct. 20, 16:10-16:40

626 Machine Learning for Classification of Mild Cognitive Impairment in Parkinson’s Disease Based on Multiparametric MRI at 3T
E. Ozturk Isik¹, S. Cengiz¹, D.B. Arslan¹, A. Kicik², E. Erdogdu³, Z. Tufekcioglu⁴, B. Bilgic⁴, H. Hanagasi⁵, A.M. Ulug¹, T. Demiralp², H. Gurvit³; ¹Institute of Biomedical Engineering, Bogazici University, Istanbul/TURKEY, ²Hulusi Behcet Life Sciences Research Center, Neuroscience Unit, Istanbul University, Istanbul/TURKEY, ³Psychology and Cognition Research Institute, Bremen University, Bremen/GERMANY, ⁴Istanbul Faculty of Medicine, Department of Neurology, Behavioral Neurology and Movement Disorders Unit, Istanbul University, Istanbul/TURKEY
MEET THE AUTHOR in the ePoster Area at PC#10, on Oct. 20, 16:10-16:40

627 Automated Pixel-Wise Brain Tissue Segmentation of Diffusion-Weighted Images via Machine Learning
A. Ciritsis, A. Boss, C. Rossi; Department of Diagnostic and Interventional Radiology, University Hospital Zürich, Zürich/SWITZERLAND
MEET THE AUTHOR in the ePoster Area at PC#11, on Oct. 20, 16:10-16:40

628 Impact of stratification on supervised classification of subjects with Autism Spectrum Disorders
E. Ferrari¹, A. Giuliano², P. Bosco², P. Oliva³, M.E. Fantacci⁴, S. Calderoni⁵, F. Muratori⁶, A. Retico²; ¹Fisica, Università di Pisa, Pisa/ITALY, ²Pisa, National Institute for Nuclear Physics (INFN), Pisa/ITALY, ³Physics Department, University of Sassari and INFN, Sassari/ITALY, ⁴Physics Department, University of Pisa, Pisa/ITALY, ⁵Developmental Neuroscience, IRCCS Stella Maris Foundation, Pisa/Italy, ⁶Developmental Neuroscience, IRCCS Stella Maris, Pisa/ITALY
MEET THE AUTHOR in the ePoster Area at PC#12, on Oct. 20, 16:10-16:40
Abdominal Imaging - Clinical

629 The dynamics of acute changes in hepatic fat content after dietary manipulation
M. Hajek¹, M. Dezortova¹, P. Sedivy¹, T. Blahova², M. Drobny¹, K. Zemankova², J. Kovar²;
¹MR-Unit, Dept. Diagnostic and Interventional Radiology, Institute for Clinical and Experimental Medicine,
Prague/CZECH REPUBLIC, ²Experimental Medicine Centre, Institute for Clinical and Experimental Medicine,
Prague/CZECH REPUBLIC
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10

630 assessment of post radiofrequency ablation of HCC; could MRI subtraction solve
M. Rezk¹, A. Nazeer², M. Sonbol², W. Ali², A. Osman², M. Samy¹, A. Sabry², H. Nafady²;
¹radiology department, NCI, Cairo/EGYPT, ²radiology department, alazhar university, Cairo/EGYPT
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10

631 Non-Linear Mixed-Effects Modelling Can Reduce the Acquisition Time When
Measuring Liver Function Using Gadoxetate Enhanced MRI
M. Karlsson¹, M.F. Forsgren¹, G. Cedersund², P. Lundberg¹; ¹Department of Medical and Health
Sciences, Division of Radiological Sciences, Linköping University, Linköping/SWEDEN, ²Department of
Biomedical Engineering, Linköping University, Linköping/SWEDEN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10

632 RENAL PERFUSION QUANTIFICATION USING RESPIRATORY GATED PSEUDO-
CONTINUOUS ARTERIAL SPIN LABELING
A. García-Osés, V. Aramendía-Vidaurreta, D. Cano, G. Bastarrika, M. Fernández-Seara;
Radiology, Clinica Universidad de Navarra, Pamplona/SPAIN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10

Abdominal Imaging - Preclinical

633 MRI-compatible imaging window for longitudinal imaging of mouse ovary
F. Bochner¹, I. Biton², M. Neeman¹; ¹Biological Regulation, Weizmann Institute of Science, Rehovot/
ISRAEL, ²Veterinary Resources, Weizmann Institute of Science, Rehovot/ISRAEL
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10

634 In vivo magnetic resonance evaluation of potential cancer stem cells isolated from
clear cell renal carcinoma cell line
M. Fiedorowicz¹, M.I. Khan², J. Orzel¹, M. Welnia-Kaminska¹, D. Strzemecki³, C. Szczylik², A. Czarnecka²; ¹Department of Experimental Pharmacology, Small Animal Magnetic
Resonance Imaging Laboratory, Mossakowski Medical Research Centre, PAS, Warsaw/POLAND,
²Department of Oncology with Laboratory of Molecular Oncology, Military Institute of Medicine, Warsaw/
POLAND, ³Department of Experimental Pharmacology, Mossakowski Medical Research Centre, PAS,
Warsaw/POLAND
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 15:40-16:10
**Animal Models**

Paper Posters of this topic can be found in the Lightning Talks Session, page 24-28

**Body & MSK**

Paper Posters of this topic can be found in the Lightning Talks Session, page 39-44

**Brain and Spine-Clinical Applications**

Paper Posters of this topic can be found in the Lightning Talks Session, page 95-103

**Cardiovascular, Breast and Chest Imaging**

635 Contrast kinetics of Gadobutrol in dynamic contrast-enhanced MRI of the breast in patients with histologically proven breast cancers initially classified as BIRADS 5 with and without a computer aided detection system.

M. Junghans¹, D. Roettger², S.d. Meens-Koreman¹, M.e.a.p.m. Adriaensen¹; °Radiology - MRI, Zuyderland MC, Heerlen/NETHERLANDS, °., Image Analysis Ltd, London/UNITED KINGDOM

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50

636 Investigating the relation between circulating cellfree DNA (cf-DNA) level of blood with the DCE-MRI parameters in Breast cancer: A preliminary study

P. Sahoo¹, T.P. Slavin², L. Tumyan³, J.N. Weitzel², L.V. Tongeren⁴, T. Jensen⁵, J. Pineda¹, R. Rockne¹; °Division of Mathematical Oncology, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, °Department of Medical Oncology & Therapeutics Research, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, °Department of Diagnostic Radiology, City of Hope, Duarte/UNITED STATES OF AMERICA, °Division of Clinical Cancer Genetics, Beckman Research Institute, City of Hope, Duarte/UNITED STATES OF AMERICA, °Research And Development, Sequenom, Inc, San Diego/UNITED STATES OF AMERICA

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50

637 PREDICTIVE MODEL OF THE CHRONIC MYOCARDIAL INFARCTION BASED ON MAGNETIC RESONANCE MICROSCOPY AND CORRELATIVE HISTOPATHOLOGY

I. Pérez Terol¹, J.M. Morales Tatay², C. Rios Navarro³, A. Hervas³, A. Ruiz Sauri⁴, V. Bodí⁵, D. Monleon⁶; °Laboratory of Molecular Imaging and Metabolomic, INCLIVA, Valencia/SPAIN, °Laboratory of Molecular Imaging and Metabolomic, Universitat de València, Valencia/SPAIN, °Cardiology, Universitat de València, Valencia/SPAIN, °Pathology, Universitat de València, Valencia/SPAIN, °Cardiology, Hospital Clinico Universitario Valencia, INCLIVA, Universitat de València, Valencia/SPAIN, °Laboratory of Molecular Imaging and Metabolomic, INCLIVA, Universitat de València, Valencia/SPAIN

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50

638 Single-Breath-Hold Local Pulse-Wave-Velocity Measurement with Quasi Random Sampled k-t-Sparse-Sense MRI

V. Herold¹, P. Winter², W.R. Bauer³, P. Jakob¹; °Physics Department, University of Würzburg, Am Hubland/GERMANY, °Physics Department, University of Würzburg, Würzburg/Germany, °Medizinische Klinik und Poliklinik 1, Universitätsklinikum, Würzburg/GERMANY

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50
**Diffusion and fMRI**

Paper Posters of this topic can be found in the Lightning Talks Session, page 53-58

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### Diffusion Weighted Imaging

**639** Computer simulations of BSD-DTI versus standard DTI  
**A. Krzyzak**, K. Borkowski; Geology, Geophysics and Environmental Protection, AGH University of Science and Technology, Krakow/POLAND  
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

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### Don’t move! Motion Artefacts and Quality Control

**640** Numerical Simulation of Artifacts in Magnetic Resonance Imaging (MRI) due to Metallic Implants  
**A. Chinnaiyan**¹, J. Kreutner², G. Schaefers³; ¹Mechanical and medical engineering, Hochschule Furtwangen, Villingen-Schwenningen/GERMANY, ²Research department, MR:comp GmbH, Testing Services for MR Safety and Compatibility, Gelsenkirchen/GERMANY, ³Research department, MRI-STAR-Magnetic Resonance Institute for Safety, Technology and Research GmbH, Gelsenkirchen/GERMANY  
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 12:15-12:45

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### fMRI

**641** Arduino based Human Interface Device for fMRI studies  
**J. Rydlo**¹, L. Hejtmanek², J. Tintera¹, I. Ibrahim¹, I. Fajnerova²; ¹Radiodiagnostic and Interventional Radiology Department, Institute for Clinical and Experimental Medicine, Prague/CZECH REPUBLIC, ²Applied Neurosciences and Brain Imaging, National Institute of Mental Health, Klecany/CZECH REPUBLIC  
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30

**642** High temporal resolution for BOLD fMRI: a comparison with standard acquisition  
**S. Fall**¹, J.-M. Constans², O. Baledent¹; ¹BioFlow Image, University of Picardy, Amiens/FRANCE, ²Radiology, Amiens University Hospital, Amiens/FRANCE  
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30

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### Image Reconstruction and Processing

**643** Image domain quasi-static background suppression in least square reconstruction for magnetic particle imaging  
**M. Straub**, V. Schulz; Department of Experimental Molecular Imaging (ExMI) / Physics of Molecular Imaging, Medical Faculty RWTH-Aachen University, Aachen/GERMANY  
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30
644 Gridding for Non-Cartesian MRI data using Graphics Processing Units
O. Inam\textsuperscript{1}, M. Qureshi\textsuperscript{2}, H. Omer\textsuperscript{3}; \textsuperscript{1}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, \textsuperscript{2}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, \textsuperscript{3}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN

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645 Line Profile Measure as a stopping Criterion in L+S Reconstruction
F. Najeeb, I. Aslam, I. Shahzadi, H. Omer; Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN

MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30

646 Low rank regularization accelerated CS recovery for in-vivo high resolution R2* mapping
A. Ayaz\textsuperscript{1}, A. Fracasso\textsuperscript{2}, S. Dumoulin\textsuperscript{2}, A.M. Kamboh\textsuperscript{1}, M.W.a. Caan\textsuperscript{3}; \textsuperscript{1}Neuro-Informatics Lab, School of Electrical Engineering and Computer Sciences, Islamabad/PAKISTAN, \textsuperscript{2}Spinoza Centre for Neuroimaging, KNAW, Amsterdam/NETHERLANDS, \textsuperscript{3}Radiology, Academic Medical Center, Amsterdam/NETHERLANDS

MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30

647 FPGA based Architecture for GRAPPA reconstruction
M.H.N. Mughal\textsuperscript{1}, O. Inam\textsuperscript{2}, M. Qureshi\textsuperscript{3}, F. Ghazali\textsuperscript{4}, H. Omer\textsuperscript{5}; \textsuperscript{1}Electrical Engineering, COMSATS Institute of Information and Technology, Islamabad/PAKISTAN, \textsuperscript{2}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, \textsuperscript{3}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad/PAKISTAN, \textsuperscript{4}R & D, NESCOM, Islamabad/PAKISTAN, \textsuperscript{5}Electrical Engineering, COMSATS Institute of Information Technology, Islamabad, Islamabad/PAKISTAN

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648 Evaluation of compressed sensing reconstruction schemes for 3D radial projections with $^{23}$Na MRI
P. Polak, M. Noseworthy; School of Biomedical Engineering, McMaster University, Hamilton/CANADA

MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30

649 Spatially weighted regularization with Magnitude prior for QSM
C. Milovic\textsuperscript{1}, B. Biligic\textsuperscript{2}, B. Zhao\textsuperscript{3}, J. Acosta-Cabronero\textsuperscript{3}, C. Tejos\textsuperscript{4}; \textsuperscript{1}Biomedical Imaging Center, Pontificia Universidad Catolica de Chile, Santiago/CHILE, \textsuperscript{2}radiology, mgh, Boston/UNITED STATES OF AMERICA, \textsuperscript{3}Wellcome Trust Centre for Neuroimaging, University College London, London/UNITED KINGDOM, \textsuperscript{4}Department of Electrical Engineering, Pontificia Universidad Catolica de Chile, Santiago/CHILE

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Interventional MRI

650 Thermographic evaluation of different media types for hot spot detection during a simulated switched MRI gradient magnetic field exposure
M. Wolff\textsuperscript{1}, S. Scholz\textsuperscript{1}, A. Douiri\textsuperscript{1}, W. Goertz\textsuperscript{1}, G. Schaefer\textsuperscript{2}; \textsuperscript{1}Testing laboratory, MR:comp GmbH Services for MR Safety & Compatibility, Gelsenkirchen/GERMANY, \textsuperscript{2}Research department, MRI-STAR-Magnetic Resonance Institute for Safety, technology and Research GmbH, Gelsenkirchen/GERMANY

MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 16:00-16:30
Scientific Programme
PAPER POSTERS

Hardware and Safety Contrasts
Paper Posters of this topic can be found in the Lightning Talks Session, page 65-69

MR Spectroscopy Methods and Applications
Paper Posters of this topic can be found in the Lightning Talks Session, page 105-111

Miscellaneous

651 Feasibility study of visualizing annual ring structures of dried wood with Ultra-Short Echo Time (UTE) magnetic resonance imaging (MRI) for chronological measurements
M. Mori1, S. Kuhara1, K. Kobayashi1, M. Yamada2, A. Senoo3; 1Department of Medical Radiological Technology, Faculty of Health Sciences, Kyorin University, Mitaka-Shi, Tokyo/JAPAN, 2graduate School of Humanities of Department of Phyllophyte, History and Cultural Studies of History, Tokyo Metropolitan University, Tokyo/JAPAN, 3Graduate School Human Health Sciences of Department of Radiological Sciences, Tokyo Metropolitan University, Tokyo/JAPAN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

652 Feasibility study of ultra-high-resolution magnetic resonance imaging (uHR-MRI) for non-destructive tree-ring measurement of archaeological wood
M. Mori1, S. Kuhara1, H. Shibou1, K. Kobayashi1, M. Yamada2, A. Senoo3; 1Department of Medical Radiological Technology, Faculty of Health Sciences, Kyorin University, Mitaka-Shi, Tokyo/JAPAN, 2graduate School of Humanities of Department of Phyllophyte, History and Cultural Studies of History, Tokyo Metropolitan University, Tokyo/JAPAN, 3Graduate School Human Health Sciences of Department of Radiological Sciences, Tokyo Metropolitan University, Tokyo/JAPAN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

653 Real-Time dynamical monitoring of plants status in normal and stress conditions : from Low Fields NMR in laboratory to compact NMR in planta
R. Sidi-Boulenouar1, C. Coillot1, E. Native1, F. Gatineau3, J.L. Verdeil3, C. Goze-Bac1; 1Laboratoire Charles Coulomb Plateforme BioNanoNMRI, Université de Montpellier, Montpellier/FRANCE, 2UMR5214, Institut d’Electронique et des systèmes (IES), Montpellier/FRANCE, 3UMR AGAP, Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), Montpellier/FRANCE
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

654 Towards an automatization of the ASTM-F2119 standard for MRI compatible needle artefact assessment
A. Illanes, J.W. Krug, M. Friebe; INKA Intelligente Katheter, Otto-von-Guericke University Magdeburg, Magdeburg/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50

MR DIAGNOSIS OF ENTRAPMENT NEUROPATHIES AT THE WRIST
S. Mehra, A. Singhal; RADIODIAGNOSIS, PGIMER DR RAM MANOHAR LOHIA HOSPITAL, New Delhi/INDIA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 11:20-11:50

Quantitative MR and diffusion tensor parameters in normal appearing brain of glioma patients are correlated with age.
F. Raschke1, T. Wesemann2, H. Wahl2, S. Appold3, M. Krause4, J. Linn2, E. Troost4; 1partner site Dresden, National Center for Tumor Diseases, Dresden/GERMANY, 2University Hospital Carl Gustav Carus and Medical Faculty of Technische Universität, Dresden, Institute of Neuroradiology, Dresden/GERMANY, 3Department of Radiotherapy and Radiooncology, University Hospital Carl Gustav Carus and Medical Faculty of Technische Universität, Dresden, Dresden/GERMANY, 4OncoRay - National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholz-Zentrum Dresden - Rossendorf, Dresden/GERMANY
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Diffusion kurtosis imaging values along interhemispheric and associative fiber tracts in healthy volunteers
E. Pogosbekian1, E. Sharova2, N. Zakharova2, L. Fadeeva3, I. Maximov4, I. Pronin3; 1Neuroimaging, Burdenko Neurosurgical institute, Moscow/RUSSIAN FEDERATION, 2Laboratory of General and Clinical Neurophysiology, Institute of Higher Nervous Activity and Neurophysiology RAS, Moscow/RUSSIAN FEDERATION, 3Neuroimaging, Burdenko Neurosurgical Institute”, Moscow/RUSSIAN FEDERATION, 4Experimental Physics III, TU Dortmund, Dortmund/GERMANY
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Intrinsic ignition describes functional brain alterations in a rat model of Alzheimer’s Disease with and without neurocognitive stimulation
R. Nitsche1, A. Sanjuan Tomas2, E. Muñoz-Moreno3, G. Soria4, R. Tudela4, G. Deco2; 1Interdepartmental Centre for Mind/Brain Sciences (CIMEC), University of Trento, Trento/ITALY, 2Computational Neuroscience Group, Center for Brain and Cognition, Department of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona/SPAIN, 3Experimental 7T MRI Unit, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona/SPAIN, 4GIB-UB, Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Barcelona/SPAIN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 12:15-12:45
662 Optimization of ultrahigh field micro-MRI methods to monitor brain disorders in Zebrafish model of depression.
U. Roy¹, M. Schaaf², J. Matysik¹, A. Alia³; ¹Faculty of chemistry and mineralogy, Institute for analytic chemistry, Leipzig/GERMANY, ²University of Leiden, Institute of Biology Leiden, Leiden/NETHERLANDS, ³University of Leipzig, Institut für Medizinische Physik und Biophysik, Leipzig/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 12:15-12:45

663 Evaluation of texture features on resting-state networks of a rat model of alcohol use disorders
R. Ortiz-Ramón¹, S. Ruiz-España¹, Ú. Pérez-Ramírez¹, A. Díaz-Parra¹, R. Cicciocoppo², S. Canals³, D. Moratal¹; ¹Center for Biomaterials and Tissue Engineering, Universitat politècnica de València, Valencia/SPAIN, ²School of Pharmacy, University of Camerino, Camerino/ITALY, ³Instituto de Neurociencias, Consejo Superior de Investigaciones Científicas, Universidad Miguel Hernández, Alacant/SPAIN
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664 Registration of mouse brain microscopy images to a MR mouse brain atlas for locating interneuron cells: a preliminary study
R. Ortiz-Ramón¹, A. Llorca², Ú. Pérez-Ramírez¹, A. Díaz-Parra¹, O. Marín², D. Moratal¹; ¹Center for Biomaterials and Tissue Engineering, Universitat politècnica de València, Valencia/SPAIN, ²Department for Developmental Neurobiology, King’s College London, London/UNITED KINGDOM
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 12:15-12:45

New Contrasts

665 Optimization of Imaging Parameters for Fast Bound Pool Fraction Estimation from a Single Off-Resonance Magnetization Transfer Measurement
M. Soellradl, L. Pirpamer, F. Fazekas, C. Langkammer, S. Ropele; Department of Neurology, Medical University of Graz, Graz/AUSTRIA
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666 ZTE imaging of the mouse knee in vivo at 9.4T
R. In ‘T Zandt; Lund Bioimaging Center LBIC, Lund University, Lund/SWEDEN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

667 SE-WMRI Fast Spin Echo Imaging
E. Wu, P.-W. Cheng, T.-D. Chiueh, J.-H. Chen; Electrical Engineering, National Taiwan University, Taipei/TAIWAN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

668 Improved signal-to-noise ratio with highly asymmetric spin-echo EPI (HASE-EPI)
M. Shrestha, U. Nöth, R. Deichmann; Brain Imaging Center (BIC), Goethe University Frankfurt, Frankfurt/main/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15
669 Adaptive Wavelet Thresholding for Profile-Encoding Reconstruction of Balanced Steady-State Free Precession Acquisitions
M. Shahdloo1, E. Ilicak1, M. Tofighi2, E.U. Saritas1, A.E. Çetin3, T. Çukur4; 1Department of Electrical and Electronics Engineering and National Magnetic Resonance Research Center (UMRAM), Bilkent University, Ankara/TURKEY, 2Department of Electrical Engineering, Pennsylvania State University, Pa/UNITED STATES OF AMERICA, 3Department of Electrical and Electronics Engineering, and I., US, University of Illinois at Chicago, Department of Electrical and Computer Engineering, Bilkent University, Ankara/TURKEY, 4Department of Electrical and Electronics Engineering, National Magnetic Resonance Research Center (UMRAM), and Neuroscience Program, Graduate School of Engineering and Science, Bilkent University, Ankara/TURKEY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

670 Lipid nanocapsules as a prognostic tool in cancer
J. Nel1, B. Gallez1, F. Franconi2, N. Joudiou1, L. Lemaire3; 1Biomedical Magnetic Resonance Unit (REMA), Université catholique de Louvain, Woluwe-Saint-Lambert, Brussels/BELGIUM, 2PRISM, IBS-CHU, Université Angers, Angers/FRANCE, 3Micro et Nanomedecines translationnelles (MINT), INSERM 1066, CNRS 6021, Université Angers, Angers/FRANCE
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671 Study of suitability of SPRITE pulse sequence for dental MRI
H. Sánchez-Izquierdo1, E. Diaz-Caballero2, A. Nacev3, D. Grau-Ruiz1, J.P. Rigla2, R. Hilaman3, J.M. Gonzalez1, G. Puchalt1, J.M. Benlloch1; 1Instituto de Instrumentación para Imagen Molecular (I3M), Universitat Politècnica de València, Valencia/SPAIN, 2Research and development, Tesoro Imaging S.L., Alicante/SPAIN, 3Research and Development, Weinberg Medical Physics, Rockville/UNITED STATES OF AMERICA
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672 Magnetic Resonance Probing Ensemble Dynamics in k-Space
V. Herold, T. Kampf, P. Jakob; Physics Department, University of Würzburg, Am Hubland/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

673 Manganese-Based Nanogels as pH Switches for Magnetic Resonance Imaging
C. Caro1, M.L. García-Martín1, M. Pernía Leal1, 1Nanodiagnostics, BIONAND, Andalusian Centre for Nanomedicine and Biotechnology, Málaga/SPAIN, 2Departamento de Química Orgánica y Farmacéutica, Universidad de Sevilla, Sevilla/SPAIN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

674 Varying the mixing time of the double diffusion experiment: A better experimental design for pore size estimation
V. Methot, P. Ulloa, M. A. Koch; Institute of medical engineering, University of Luebeck, Luebeck/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15

675 1H, 13C and 19F hyperpolarization of three substituted pyridine derivates
M. Plaumann1, R. Ringleb1, F. Euchner1, S. Hadjialia2, J. Bargon3, U. Bommerich1, G. Buntkowsky2, J. Bernarding1; 1Department for Biometrics and Medical Informatics, Otto-von-Guericke University, Magdeburg/GERMANY, 2Eduard-Zintl-Institute of Inorganic and Physical Chemistry, TU Darmstadt, Darmstadt/GERMANY, 3Institute of Physical and Theoretical Chemistry, University of Bonn, Bonn/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 19, 11:45-12:15
Novel Hardware and Sequences

676 8-channel receive-only coil array for MR microscopy at 7T
E. Hosseini, R. Frass-Kriegl, L.I. Navarro De Lara, J. Sieg, M. Pichler, E. Moser, A. Berg, E. Laistler; Division MR Physics, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Wien/AUSTRIA
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

677 A quadrature surface loop receive/ volume transmit coil design for rat brain MRI at 9.4 T and 14.1 T
Ö. Ipek¹, P. Laub², J. Fernandez Giacomini², Y. Pilloud¹, A. Capozzi², H. Lei¹, R. Gruetter²;¹CIBM, EPFL, Lausanne/SWITZERLAND, ²Laboratory of Functional and Metabolic Imaging (LIFMET), Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne/SWITZERLAND
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

678 Space Harmonics Suppression (SHS) Wire Antenna: new RF probes for the Magnetic Resonance Imaging
P. De Pellegars¹, C. Coillot², E. Nativel³, E. Alibert², C. Goze-Bac², R. Schimpf², J. Muller⁵;¹Platforme BioNanoNMRI, SATT AxLR, Montpellier/FRANCE, ²Laboratoire Charles Coulomb Plateforme BioNanoNMRI, University of Montpellier, Montpellier/FRANCE, ³UMR5214, Institut d'Electronique et des Systèmes (IES), Montpellier/FRANCE, ⁴President, RS2D, Mundolsheim/France, ⁵Chief Technical Officer, RS2D, Mundolsheim/France
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

679 8 Dual Channel Power Module for MRI shimming System
J.P. Rigla Pérez¹, G. Pcasáns², D. Grau-Ruiz², L. Hernandez², E. Diaz-Caballero¹, J.M. Gonzalez², H. Sánchez²;¹Research and development, Tesoro Imaging S.L., Alicante/SPAIN, ²Instituto de Instrumentación para Imagen Molecular (I3M), Universitat Politècnica de València, Valencia/SPAIN
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

680 Can scans with different TR be combined to improve UTE T2* measurements
D.H.J. Poot, P. Baron, J. Hernandez Tamames; Radiology and Nuclear Medicine Department, Erasmus MC, Rotterdam/NETHERLANDS
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

681 Minimum Out of Slice Error SMS RF Pules Design with Direct Peak, Power, and In Slice Error Constraints
S.N. Williams¹, J.A. Fessler², D.C. Noll¹;¹Biomedical Engineering, University of Michigan, Ann Arbor, Mi/UNITED STATES OF AMERICA, ²Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, Mi/UNITED STATES OF AMERICA
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00
Detection of bone marrow changes related to osteoporosis using a stray field NMR
U. Nevo; Biomedical Engineering, Tel Aviv University, Tel Aviv/ISRAEL
MEET THE AUTHOR in the Paper Poster Area on Oct. 19, 16:30-17:00

**Peaks and Valleys - MR Spectroscopy**

683 Effect of exercise on glycogen $^{13}$C-1 transverse relaxation time $T_2$ in human muscle at 7T
E. Serés Roig, R. Gruetter; Laboratory of Functional and Metabolic Imaging (LIFMET), Ecole Polytech Fédérale de Lausanne (EPFL), Lausanne/SWITZERLAND
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

684 Investigating TM-Averaged STEAM for Glutamate Measurements at 3 T
R. Kämpe, A. Tisell; 1CSAN, Linköping University, IKE, Linköping/SWEDEN, 2Radiation physics, Linköping University, Linköping/SWEDEN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

685 Initial Experience with a 3D MEGA-semi-LASER MRS sequence
S. Tapper, A. Tisell, P. Lundberg; Department of medical and health sciences, Linköping University, Linköping/SWEDEN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

686 Exacerbated in vivo metabolic changes suggestive of a spontaneous muscular vaso-occlusive crisis in exercising muscle: a 31P MRS study in a mouse model of sickle cell disease
B. Chatel, L. Messonnier, D. Bendahan; 1CRMBM, UMR CNRS 7339, Aix-Marseille Université, Marseille/FRANCE, 2LIBM, Université Savoie Mont Blanc, Chambéry/FRANCE
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

687 Optimization of Echo Times for TE-Averaged PRESS Spectral Editing Technique Using Monte Carlo Simulations
G.H. Hatay, E. Ozürk Isık; Institute of Biomedical Engineering, Bogazici University, Istanbul/TURKEY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

688 Liver Cholesterol is a biomarker of Niemann-pick diseases progression and liver damage and could be quantified with MRS
A. Xavier, F. Zacconi, K. Fuenzalida, S. Zanlungo, M. Andia; 1Biomedical Imaging Center, Pontificia Universidad Católica de Chile, Santiago/CHILE, 2Faculty of Chemistry, Pontificia Universidad Católica de Chile, Santiago/CHILE, 3Instituto de Nutrición y Tecnología de los Alimentos (INTA), Santiago/CHILE, 4Faculty of Medicine, Pontificia Universidad Católica de Chile, Santiago/CHILE, 5Radiology Department, Pontificia Universidad Católica de Chile, Santiago/CHILE
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

689 Old dog, new tricks - Functional, non-destructive and quantifying MRI/MRS methodology of bones and soft tissue in a rat model for degradable magnesium based implants
M. Meier, D. Haake, A. Weinberger, R. Willumeit-Römer; 1ZTL-Imaging Center, Hannover Medical School, Hannover/GERMANY, 2Musculo-Skeletale FE f. Biomaterialien, Medical University of Graz, Graz/AUSTRIA, 3Biologische Grenzflächen von Implantaten, Christian-Albrechts-University Kiel, Kiel/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40
689a Towards Opto-fMRS: Assessment of metabolic changes resulting from optogenetic stimulation using a BOLD free-difference spectrum

N. Just, C. Faber; University Hospital of Münster, Translational Research Imaging Center, Münster/GERMANY

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

Perfusion and Molecular Imaging
Paper Posters of this topic can be found in the Lightning Talks Session, page 87-92

Pulse Sequences and Novel Contrasts
Paper Posters of this topic can be found in the Lightning Talks Session, page 31-37

Rise of the machines

690 Impact of volume size on radiomic features computed from MR images: an illustration in pediatric neuroimaging

J. Goya Outi¹, F. Orlhac¹, R. Calmon2, C. Nioche¹, C. Philippe3, A. Alentorn3, J. Grill4, V. Frouin²; ¹IMIV, INSERM/CEA/CNRS/Université Paris-Sud/Université Paris-Saclay, Orsay/FRANCE, ²Radiologie, AP-HP, Paris/FRANCE, ³Neurospin/DRF, CEA, Gif-Sur-Yvette/FRANCE, ⁴CNRS UMR 8203, Gustave-Roussy, Villejuif/FRANCE, ⁵INSEMR/CEA-SHFJ/CNRS/Université Paris-Sud/Université Paris-Saclay, IMIV, Orsay/FRANCE

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

691 Inter-session Reproducibility and consistency after preprocessing as methods for quality control in MRI quantitative radiomics

R. Du, K.W.H. Chiu, E.Y.P. Lee, V. Vardhanabhuti; Department of Diagnostic Radiology, The University of Hong Kong, Hong Kong/HONG KONG PRC

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

692 3-D LGE-MRI Segmentation using a Random Forest Classifier and Dynamic Programming


MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

693 Automatic segmentation of knee muscles in 3D MRI data using deep learning

K. Giang¹, A. Chodorowski²; ¹Electrical Engineering, Signals and systems, Chalmers University of Technology, Gothenburg/SWEDEN, ²Electrical Engineering, Signals and Systems, Gothenburg/SWEDEN

MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40
694 3D convolutional neural network for hippocampal subfields segmentation in ultra-high resolution MRI
N. Jacobsen\textsuperscript{1}, B.D. Hansen\textsuperscript{1}, A.K. Nørh\textsuperscript{1}, L.R. Østergaard\textsuperscript{1}, S.B. Petersen\textsuperscript{1}, S. Bollmann\textsuperscript{2};
\textsuperscript{1}Department of health science and technology, Aalborg University, Aalborg/DENMARK, \textsuperscript{2}Centre for Advanced Imaging, The University of Queensland, St Lucia/AUSTRALIA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

695 Evaluation of 2D texture analysis on fMRI data to identify changes in the striatal network induced by alcohol drinking
S. Ruiz-España\textsuperscript{1}, R. Ortiz-Ramón\textsuperscript{1}, Ú. Pérez-Ramírez\textsuperscript{1}, A. Díaz-Parra\textsuperscript{1}, R. Ciccocioppo\textsuperscript{2}, S. Canals\textsuperscript{3}, D. Moratal\textsuperscript{1}; \textsuperscript{1}Center for Biomaterials and Tissue Engineering, Universitat politècnica de València, Valencia/SPAIN, \textsuperscript{2}School of Pharmacy, University of Camerino, Camerino/ITALY, \textsuperscript{3}Instituto de Neurociencias, Consejo Superior de Investigaciones Científicas, Universidad Miguel Hernández, Alacant/SPAIN
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

696 Dimensionality Reduction Of Arterial Spin Labeling Reveals An Age Gradient
J.H. Kirchner\textsuperscript{1}, E. Kaya\textsuperscript{1}, E. Kellner\textsuperscript{2}, S. Yang\textsuperscript{1}, S. Kohl\textsuperscript{1}, H. Urbach\textsuperscript{1}, K. Egger\textsuperscript{1}; \textsuperscript{1}Dept. of Neuroradiology, Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Germany, Freiburg/GERMANY, \textsuperscript{2}Dept. of Radiology, Medical Physics, Faculty of Medicine, Medical Center University of Freiburg, Freiburg/GERMANY
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 16:10-16:40

Quantification and Post-Processing
Paper Posters of this topic can be found in the Lightning Talks Session, page 75-79
Scientific Programme

CLINICAL REVIEW POSTERS

MEET THE AUTHOR time slot:
Friday, October 20, 10:50–11:20

ePosters

697 Epilepsia Partialis continua Multimodality imaging features reexplored Pearls every resident must know
R. Vadapalli¹, A.S. Vadapalli², S.J. Sattaluri³, M. Panigrahi³; ¹radiology, Vijaya diagnostics, Hyderabad/INDIA, ²Medicine, AFMC PUNE, Pune/INDIA, ³Neuroepileptology, KIMS Hyderabad, Secunderabad/INDIA
MEET THE AUTHOR in the ePoster Area at PC#1, on Oct. 20, 10:50-11:20

698 Arterial spin labelling: Basics and current emerging clinical applications what every resident must know
R. Vadapalli¹, A.S. Vadapalli²; ¹radiology, Vijaya diagnostics, Hyderabad/INDIA, ²Medicine, AFMC PUNE, Pune/INDIA
MEET THE AUTHOR in the ePoster Area at PC#2, on Oct. 20, 10:50-11:20

699 Diffusion-weighted imaging as a simple method for visualization of cerebrospinal fluid dynamics on MRI
E. Yamashita¹, T. Yamane¹, Y. Tanabe², T. Ogawa²; ¹Division of clinical radiology, Tottori university hospital, Yonago/JAPAN, ²Division of Radiology, Department of Pathophysiological Therapeutic Science, Faculty of Medicine, Tottori university, Yonago/JAPAN
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 20, 10:50-11:20

700 ASYMPTOMATIC T1 PALLIDAL HYPERINTENSITY IN PATIENTS WITH CHRONIC LIVER DISEASE
F. Costa, J.P. Filipe, A. Aires, C. Reis, J. Fonseca; Neuroradiology, Centro Hospitalar São João, Porto/PORTUGAL
MEET THE AUTHOR in the ePoster Area at PC#3, on Oct. 20, 10:50-11:20

701 Gelastic seizures : Multimodality Imaging substrates and their pathological correlates,-Pictorial review
R. Vadapalli¹, A.S. Vadapalli², S.J. Sattaluri³, M. Panigrahi³; ¹radiology, Vijaya diagnostics, Hyderabad/India, ²Medicine, AFMC PUNE, Pune/INDIA, ³Neuroepileptology, KIMS Hyderabad, Secunderabad/INDIA
MEET THE AUTHOR in the ePoster Area at PC#4, on Oct. 20, 10:50-11:20

702 Imaging biomarkers of Hirayama disease: Conventional dynamic MRI and DTI findings of Hirayama’s Disease :Pictorial review
R. Vadapalli¹, A.S. Vadapalli², R.D. Mulukutla³, S. Vermula⁴; ¹radiology, Vijaya diagnostics, Hyderabad/INDIA, ²Medicine, AFMC PUNE, Pune/INDIA, ³SPINE AND ORTHOPEDIC SURGERY, UDAI OMNI HOSPITALS, Hyderabad/INDIA, ⁴neurology, Magna hospitals, Hyderabad/INDIA
MEET THE AUTHOR in the ePoster Area at PC#5, on Oct. 20, 10:50-11:20
Many Multi-modality imaging Avatars of Vascular dementia and its mimics and variants: what every neuro resident must know

R. Vadapalli¹, A.S. Vadapalli², S.J. Sattaluri³; ¹radiology, Vijaya diagnostics, Hyderabad/INDIA, ²Medicine, AFMC PUNE, Pune/INDIA, ³Neuroepileptology, KIMS Hyderabad, Hyderabad/INDIA

Compensatory role of the cerebellum? - An alexia partial recovery case report

P. Naumczyk¹, A. Marcinkowska², A. Sabisz³, M. Łockiewicz¹, K. Kluj-Kozlowska⁴, E. Narożna⁵, M. Sildatke-Bauer⁶, J. Sławek⁷, E. Szurowska³, E. Sitek⁷; ¹Social Sciences, Institute of Psychology, University of Gdańsk, Gdańsk/POLAND, ²2nd Radiology Department, Medical University of Gdańsk, Gdańsk/Poland, ³Second Department of Radiology, Medical University of Gdańsk, Gdańsk/POLAND, ⁴Department of Polish Philology, University of Gdańsk, Gdańsk/POLAND, ⁵Neurology Department, Copernicus, Szpital sw. Wojciecha, Gdańsk/POLAND, ⁶Ophthalmology Department, Copernicus, Szpital sw. Wojciecha, Gdańsk/POLAND, ⁷Department of Nursing, Medical University of Gdańsk, Gdańsk/POLAND

Carcinoid tumor of the middle ear: a potential misdiagnosis of cholesteatoma on HASTE DWIs

M. Ersen, H.T. Sanal, B. Arik, M. Tasar; Radiology, Gülhane Training and Research Hospital, Ankara/TURKEY

Differentiation between papillary renal cell carcinoma and fat-poor angiomyolipoma: a preliminary study assessing detection of intratumoral hemorrhage with chemical shift MRI and T2*-weighted gradient echo

S.Y. Kim, S. Woo, J.Y. Cho, S.H. Kim; RADIOLOGY, SEOUL NATIONAL UNIVERSITY HOSPITAL, Seoul/KOREA, REPUBLIC OF

Pictorial Review: Magnetic Resonance Imaging Findings of Left Ventricle Hypertrabeculation and Noncompaction

F.G. Rodríguez-Ruiz, L. Rodríguez-Ortiz, J. Maldonado-Vargas; Department of Diagnostic Radiology, University of Puerto Rico School of Medicine, San Juan/PUERTO RICO

MR Imaging of the complications in hepatic hydatid disease

D. Herek; Radiology, Pamukkale University School of Medicine, Denizli/TURKEY

Development and Optimisation of a 3T MRI Protocol for Use in Oesophageal Cancer Staging Research

K. Foley¹, P. Griffiths², A. Roberts³, A. Riddell⁴; ¹School of Medicine, Cardiff University, Division of Cancer & Genetics, Cardiff/UNITED KINGDOM, ²Institute of Life Sciences, Swansea University, Swansea/UNITED KINGDOM, ³Department of Radiology, University Hospital of Wales, Cardiff/UNITED KINGDOM, ⁴Department of Radiology, Royal Marsden Hospital, Surrey/UNITED KINGDOM

143
Scientific Programme

CLINICAL REVIEW POSTERS

MEET THE AUTHOR time slot:
Friday, October 20, 10:50–11:20

710 Pictorial Review: MRI Evaluation of Perianal Fistulas in Crohn’s Disease
L. Rodríguez-Ortiz, L. Figueroa-Diaz, M. Betancourt-Torres, J. Lara-Ríos, G. Ballester-Ortiz; Department of Diagnostic Radiology, University of Puerto Rico School of Medicine, San Juan/PUERTO RICO
MEET THE AUTHOR in the ePoster Area at PC#13, on Oct. 20, 10:50-11:20

711 Utility of PET/MR in head and neck cancer.
T. Sekine¹, F. Barbosa², G. Delso², E. Ter Voert², P. Veit-Haibach², M. Huellner²; ¹Department of Radiology, Nippon Medical School, Tokyo/JAPAN, ²Department of Nuclear Medicine, University Hospital Zurich, Zurich/SWITZERLAND
MEET THE AUTHOR in the ePoster Area at PC#14, on Oct. 20, 10:50-11:20

712 WITHDRAWN

713 HOW TO EVALUATE PROSTATE MRI IN 7 STEPS
Ş.B. Arik, M. Tasar, M. Ersen, H.T. Sanal, K.N. Arda, B. Karaman, S. Hamcan, U. Bozlar; Radiology, Gülhane Training and Research Hospital, Ankara/Turkey
MEET THE AUTHOR in the ePoster Area at PC#16, on Oct. 20, 10:50-11:20

714 Cardiac MRI: Examination and evaluation steps with case examples
U. Bozlar, M. Tasar, M. Ersen, B. Arik, S. Hamcan, K.N. Arda, H.T. Sanal; Radiology, Gülhane Training and Research Hospital, Ankara/Turkey
MEET THE AUTHOR in the ePoster Area at PC#17, on Oct. 20, 10:50-11:20

Paper Posters

715 Experience with 3T, 32-channel Head Coil and Multi Transmit in the diagnosis of Malignant Melanomas in the eye
H. Simonsen¹, K. Segers², B. Moeller²; ¹Functional Imaging Unit, Dept. of Clinical Physiology, Nuclear Medicine and PET, Rigshospitalet, Glostrup/GLOSTRUP, DENMARK, ²Department of Radiology, Rigshospitalet, Glostrup/GLOSTRUP, DENMARK
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

716 Novel multimodal diagnostic approach for patients with chronic disorders of consciousness
E. Kremneva, L. Legostaeva, E. Mochalova, S. Morozova, D. Sinitsyn, D. Sergeev, A. Poydasheva, O. Chervyakova, Y. Ryabinkina, N. Suponeva, M. Piradov; Radiology, Research Center of neurology, Moscow/RUSSIAN FEDERATION
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20
717 Decreased level of consciousness in thalamic hemorrhage patient
E. Kremneva¹, L. Legostaeva², E. Mochalova³, A. Poydasheva², S. Morozova¹, D. Sergeev³, D. Sinitsyn², Y. Ryabininka³, O. Chervyakova², N. Suponeva², M. Piradov³;
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MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

718 Failed Back Surgery Syndrome: a pilot study of preliminary chronic pain patterns in fMRI data
L. Piliponis¹, J. Ušinskienė², G. Terbetas³, G. Kazakevičiūtė-Januškevičienė⁴; ¹Faculty of Medicine, Vilnius University, Vilnius/ LITHUANIA, ²Department of Radiology, National Cancer Institute, Vilnius/ LITHUANIA, ³Department of Neurosurgery, Republican Vilnius University Hospital, Vilnius/ LITHUANIA, ⁴Department of Graphical Systems, Vilnius Gediminas Technical University, Vilnius/ LITHUANIA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

719 The use of 3D FLAIR sequence in subarachnoid hemorrhage detection in sedated pediatric patients with acute TBI.
I. Melnikov, M. Ublinskiy, T. Akhadov; Radiology, Clinical and Research Institute of Emergency Pediatric Surgery and Trauma, Moscow/ RUSSIAN FEDERATION
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

720 1st RMN spectroscopy in-vitro in in-vivo conditions of different drug
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

721 GLIOBLASTOMA RECURRANCE THERAPIES RESPONSE ASSESSMENT BY SPECTROSCOPIC AND MRI VOLUMETRIC MEASUREMENTS
J.p. Chombar¹, A. Heintz², O. Seloi³, M. Boone⁴, R. Hanafi⁵, H. Deramond⁶, W. Dou⁷, S. Metembour⁸, P. Toussaint⁹, C. Desenclos⁴, A. Coutte⁴, M. Lefranc⁴, D. Le Gars⁴, B. Chauffert⁴, J.-M. Constan; ¹Somme, CHU Amiens Picardie, Salouël/FRANCE, ²Electronics, Tsinghua University, Beijing/CHINA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

722 SUSPICIOUS CARDIAC MRI FINDINGS: CARDIAC MYXOMA
K. Blank¹, N.R. Valeviciene²; ¹Faculty of Medicine, Vilnius University, Vilnius/ LITHUANIA, ²Department of Radiology and Nuclear medicine, Vilnius University Hospital Santaros Klinikos, Vilnius/ LITHUANIA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

723 Magnetic Resonance Investigation of photochemically modified polymer surfaces and their application to MRI-visible medical devices
M. Cardoso¹, A. Schulz², L. Allegre³, J. Coudane³, C. Goze-Bac³, B. Nottelet²;
¹BioNanoNMRI facility, University of Montpellier, Montpellier/FRANCE, ²IBMM, Université de Montpellier, Montpellier/FRANCE, ³Laboratoire Charles Coulomb Plateforme BioNanoNMRI, University of Montpellier, Montpellier/FRANCE
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20

724 Diagnosis of Atrial Myxomas by Dynamic Cardiac MR
S. Mehr; RADIODIAGNOSIS, PGIMER DR RAM MANOHAR LOHIA HOSPITAL, New Delhi/INDIA
MEET THE AUTHOR in the Paper Poster Area, on Oct. 20, 10:50-11:20
Scientific Programme
SOFTWARE EXHIBITS
MEET THE AUTHOR time slots:
Thursday, October 19, 14:00–15:00
Friday, October 20, 13:50–14:50

Data analysis: MR imaging

725 L1-LAD: Iterative MRI reconstruction using L1 constrained least absolute deviation
J.-M. Lin¹, H.-C. Chang², T.-C. Chao³, S.-Y. Tsai⁴, A. Patterson⁵, H.-W. Chung⁶, J. Gillard¹,
M. Graves⁵; ¹Department of Radiology, University of Cambridge, Cambridge/UNITED KINGDOM,
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Taipei/TAIWAN, ⁵MRIS Unit, Cambridge University Hospitals NHS Foundation Trust, Cambridge/UNITED
KINGDOM, ⁶Electrical Engineering, National Taiwan University, Taipei/TAIWAN
MEET THE AUTHOR on desk 1

726 An interactive, real-time, MRI simulator for smartphone/tablet
S. Månsson; Medical Radiation Physics, Lund University, Malmö/SWEDEN
MEET THE AUTHOR on desk 2

727 Fast Nonlinear Susceptibility Inversion (FANSI Toolbox for QSM)
C. Milovic¹, B. Bilgic², B. Zhao², J. Acosta-Cabronero³, C. Tejos¹; ¹Biomedical Imaging Center,
Pontificia Universidad Catolica de Chile, Santiago/CHILE, ²radiology, mgh, Boston/UNITED STATES
OF AMERICA, ³Wellcome Trust Centre for Neuroimaging, University College London, London/UNITED
KINGDOM
MEET THE AUTHOR on desk 3

728 GPU enabled implementation of 3 Compartment Leaky Tracer Kinetic Model
(LTKM) for DCE-MRI
D. Rathore, R. Rathore; Imaging R&D, ADISL, Kanpur/INDIA
MEET THE AUTHOR on desk 4

729 Simple and easy-to-use graphical user interface (GUI) for accurate and stable
mapping of T2 relaxation values
D. Radunsky, N. Ben-Eliezer; Department of Biomedical Engineering, Tel Aviv University, Tel Aviv/
ISRAEL
MEET THE AUTHOR on desk 5

730 Pulseq: A Rapid and Hardware-Independent Pulse Sequence Prototyping
Framework
S. Kroboth¹, K. Layton², F. Jia¹, S. Littin¹, H. Yu¹, J. Leupold¹, J.-F. Nielsen³, T. Stoecker⁴,
M. Zaitsev¹; ¹University Medical Center University of Freiburg, Faculty of Medicine, University of
Freiburg, Dept. of Radiology, Medical Physics, Freiburg/GERMANY, ²University of South Australia,
Institute for Telecommunications Research, Mawson Lakes/AUSTRALIA, ³Department of Biomedical
Engineering, University of Michigan, Michigan/UNITED STATES OF AMERICA, ⁴DZNE, German Center for
Neurodegenerative Diseases, Bonn/GERMANY
MEET THE AUTHOR on desk 6
731 ConsTru: An Optimal B0 Shimming Solution
P. Chang1, S. Nassirpour1, A. Henning2; 1Ultra High Field for MRI, Max Planck Institute for Biological Cybernetics, Tuebingen/GERMANY, 2Institute of Physics, Ernst-Moritz-Arndt University Greifswald, Greifswald/GERMANY

MEET THE AUTHOR on desk 7

732 ARIANNA: a web-based platform for collaborative research in neuroimaging of Autism Spectrum Disorders
A. Giuliano1, A. Retico1, P. Bosco1, S. Arezzini1, S. Calderoni2, A. Ciampa1, S. Coscetti1, S. Cuomo3, L. De Santis4, D. Fabiani1, M.E. Fantacci5, E. Mazzoni1, P. Mercatali4, G. Miscali2, M. Pardini1, M. Prosperi2, M. Prosperi2, F. Romano3, E. Tamburini5, M. Tosetti7, F. Muratori2; 1Pisa, National Institute for Nuclear Physics (INFN), Pisa/ITALY, 2Developmental Neuroscience, IRCCS Stella Maris Foundation, Pisa/ITALY, 3Institute of Legal Information Theory and Techniques (ITTIG), National Research Council (CNR), Florence/ITALY, 4S.r.l., NET7, Pisa/ITALY, 5Physics Department, University of Pisa, Pisa/ITALY, 6S.r.l., I+, Florence/ITALY, 7Imago7 Foundation, Imago7 Foundation, Pisa/ITALY

MEET THE AUTHOR on desk 8

733 ExploreASL: image processing toolbox for multi-center arterial spin labeling population analyses
H.J. Mutsaerts1, J. Petr2, E. Lysvik3, A. Schrantee4, Z. Shirzadi6, F. Zelaya6, I. Groote3, O. O’Daly6, J. Kuijer1, J. De Bresser7, E. Richard8, M.W.a. Caan9, M. Van Osch10, X. Golay11, L. Reneman4, B. Macintosh5, M. Masellis5, J. Hendrikse7, F. Barkhof1, A. Bjornerud3, A.J. Nederveen12, I. Aslani13, P. Groot4; 1Radiology, VU University Medical Center, Amsterdam/NETHERLANDS, 2PET Center, Helmholtz-Zentrum Dresden-Rossendorf, Dresden/GERMANY, 3Diagnostic Physics, Oslo University Hospital, Oslo/NORWAY, 4Radiology and Nuclear Medicine, Academic Medical Center, Amsterdam/NETHERLANDS, 5Sunnybrook Research Institute, University of Toronto, Toronto/CANADA, 6Institute of Psychiatry, King’s College London, London/UNITED KINGDOM, 7Radiology, University Medical Center, Utrecht/NETHERLANDS, 8Neurology, Radboud University Medical Center, Nijmegen/NETHERLANDS, 9Radiology, Academic Medical Center, Amsterdam/NETHERLANDS, 10C.J. Gorter Center for high field MRI, department of Radiology, LUMC, Leiden/NETHERLANDS, 11Brain Repair & Rehabilitation, Institute of Neurology, University College London, UK, London/UNITED KINGDOM, 12Department of Radiology, Academic Medical Center Amsterdam, Amsterdam/NETHERLANDS, 13Kate Gleason College of Engineering, Rochester Institute of Technology, New York/UNITED STATES OF AMERICA

MEET THE AUTHOR on desk 9

Data analysis: MR spectroscopy

734 OpenMRSLab: An open-source software repository for Magnetic Resonance Spectroscopy data analysis tools
B. Rowland; Cardiff University Brain Research Imaging Centre, Cardiff University, Cardiff/UNITED KINGDOM

MEET THE AUTHOR on desk 10
Scientific Programme

SOFTWARE EXHIBITS

MEET THE AUTHOR time slots:
Thursday, October 19, 14:00–15:00
Friday, October 20, 13:50–14:50

Decision-support systems

735 Medical imaging in the browser with the A* Medical Imaging (AMI) toolkit.
N. Rannou1, J.L. Bernal-Rusiel2, D. Haehn3, P.E. Grant2, R. Pienaar2; 1Medical, Eunate Technology S.L., Sopela/SPAIN, 2Fetal-Neonatal Neuroimaging and Developmental Science Center, Boston Childrens Hospital, Boston/UNITED STATES OF AMERICA, 3Computer Science, Harvard University, Cambridge/UNITED STATES OF AMERICA

MEET THE AUTHOR on desk 11

736 Implementation of Camino Diffusion MRI Toolkit: reconstruction of White Matter tissue in presence of demyelinating disease
S. Oliviero, C. Del Gratta; Neuroscience, Imaging and Clinical Sciences/ITAB, University of Chieti-Pescara G. D’Annunzio, Chieti/ITALY

MEET THE AUTHOR on desk 12

737 KStroke: A Computer-Aided-Diagnosis Software Package for fully automated Processing, Segmentation and Analysis of Diffusion/Perfusion-MRI in Acute Stroke
E. Kellner1, M. Reisert1, V.G. Kiselev1, H. Urbach2, K. Egger3; 1Dept. of Radiology, Medical Physics, Faculty of Medicine, Medical Center University of Freiburg, Freiburg/GERMANY, 2Dept. of Neroradiology, Faculty of Medicine, Medical Center University of Freiburg, Freiburg/GERMANY, 3Dept. of Neroradiology, Physics, Faculty of Medicine, Medical Center University of Freiburg, Freiburg/GERMANY

MEET THE AUTHOR on desk 13

Machine Learning

738 An online service for fully-automatic prostate MRI segmentation
G.A. García Ferrando1, J. Juan-Albarracín1, E. Fuster-Garcia1, C. Monserrat Aranda2, J.M. García-Gómez1; 1Instituto de Aplicaciones de las Tecnologías de la Información y de las Comunicaciones Avanzadas (ITACA), Universitat Politècnica de València, València/SPAIN, 2Departamento de Sistemas Informàtics y Computació (DSIC), Universitat Politècnica de València, València/SPAIN

MEET THE AUTHOR on desk 14

739 MTSimaging: multiparametric image analysis services for vascular characterization of glioblastoma.
E. Fuster-García, J. Juan-Albarracín, J.M. García-Gómez; Instituto de Aplicaciones de las Tecnologías de la Información y de las Comunicaciones Avanzadas (ITACA), Universitat Politècnica de València, València/SPAIN

MEET THE AUTHOR on desk 15
Scientific Programme

MEET THE AUTHOR time slot: Saturday, October 21, 10:50–11:50

VIEWS: Opinion and Discussion Section

VIEWS 1  The claustrophobic patient
M. Junghans, C. Cardinaals, E. Sterck, S. Quodbach-van Eeghem; Zuyderland MC, Radiology – MRI, Heerlen/NETHERLANDS

VIEWS 2  Direct v Indirect Targeting Techniques for Deep Brain Stimulation surgery
J. Morris; University of Queensland, Queensland Brain Institute, Brisbane/AUSTRALIA

VIEWS 3  The value of Open Source for Research, Education and Global Health - Open Source Imaging Initiative
L. Broche¹, I. Nenadic²; ¹RWTH Aachen, IZFK Aachen, Aachen/Germany, ²The University of Queensland, Centre for Advanced Imaging, Brisbane/AUSTRALIA, ³Max Delbrück Center for Molecular Medicine in the Helmholtz Association, Berlin Ultrahigh Field Facility (B.U.F.F.), Berlin/Germany

VIEWS 4  Power spectral density (PSD) of fMRI brain activity differs between genders and networks
G. Mingoia¹, R. Pellicer-Guridi², L. Winter³; ¹University of Aberdeen, ABIC, Aberdeen/UNITED KINGDOM, ²Philipps-Universität Marburg, Klinik für Psychiatrie und Psychotherapie, Marburg/Germany

VIEWS 5  Resting state networks alteration in Bipolar depression
I. Nenadic¹, G. Mingoia²; ¹Philipps-Universität Marburg, Klinik für Psychiatrie und Psychotherapie, Marburg/Germany, ²RWTH Aachen, IZFK Aachen, Aachen/Germany

VIEWS 6  Investigation of the effects of environmental manganese exposure on adolescent neurodevelopment with brain MRI
C. Pinardi¹, C. Ambrosi², L. Mascaro², E. Belligotti², R. Gasparotti², R. Lucchini⁴; ¹University of Parma, Department of Medicine and Surgery, Neuroscience Unit, Parma/ITALY, ²Spedali Civili di Brescia, Neuroradiology, Brescia/ITALY, ³Spedali Civili di Brescia, Medical Physics Department, Brescia/ITALY, ⁴University of Brescia, Occupational Medicine, Brescia/ITALY

VIEWS 7  Design and fabrication of two MR saddle coils for 1H and 19F at 1.5 tesla
M. Mohammadzadeh¹, J. Parsa², H.R. Saligheh Rad³; ¹Shahid Beheshti University, Institute of medical science technology, Tehran/IRAN, ²Sharif University, Energy, Tehran/IRAN, ³Tehran University of Medical Science, Medical physics and biomedical engineering, Tehran/IRAN

VIEWS 8  About Magnetic and Electric antennas
A. Missoffe; IADI, INSERM U947, IADI, INSERM U947, Vandoeuvre Cedex/France

VIEWS 9  Is it time to change our approach to MRI development?
C. Wiggins¹, S. Roozen²; ¹Scannexus, BV, Maastricht/NETHERLANDS, ²Maastricht University, Governor Kremers Centre, Maastricht/NETHERLANDS
# Author Index

## A

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdurrachim, D.</td>
<td>194</td>
</tr>
<tr>
<td>Alibert, E.</td>
<td>678</td>
</tr>
<tr>
<td>Alia, A.</td>
<td>488, 662</td>
</tr>
<tr>
<td>Ali, W.</td>
<td>630</td>
</tr>
<tr>
<td>Alentorn, A.</td>
<td>351, 690</td>
</tr>
<tr>
<td>Ález, C.</td>
<td>73, 100, 619, 719</td>
</tr>
<tr>
<td>Al Dahery, S.</td>
<td>.</td>
</tr>
<tr>
<td>Akhadov, T.</td>
<td>.</td>
</tr>
<tr>
<td>Achten, E.</td>
<td>396, 399, 401, 500, 506</td>
</tr>
<tr>
<td>Achten, R.</td>
<td>363</td>
</tr>
<tr>
<td>Acosta-Cabronero, J.</td>
<td>104, 337, 649, 727</td>
</tr>
<tr>
<td>Adalid, V.</td>
<td>503</td>
</tr>
<tr>
<td>Adam, G.</td>
<td>26</td>
</tr>
<tr>
<td>Adamkova, M.</td>
<td>598</td>
</tr>
<tr>
<td>Adriaensen, M.E.A.P.M.</td>
<td>635</td>
</tr>
<tr>
<td>Adumeau, L.</td>
<td>410</td>
</tr>
<tr>
<td>Aghaeifard, A.</td>
<td>54, 71, 126, 270</td>
</tr>
<tr>
<td>Ahlhelm, F.</td>
<td>586</td>
</tr>
<tr>
<td>Ahlman, M.A.</td>
<td>385</td>
</tr>
<tr>
<td>Ahmed, F.</td>
<td>247</td>
</tr>
<tr>
<td>Ahmeti, H.</td>
<td>402</td>
</tr>
<tr>
<td>Aiello, M.</td>
<td>560</td>
</tr>
<tr>
<td>Aigner, C.S.</td>
<td>59</td>
</tr>
<tr>
<td>Aime, S.</td>
<td>14, 281, 607</td>
</tr>
<tr>
<td>Aires, A.</td>
<td>700</td>
</tr>
<tr>
<td>Akatsuka, Y.</td>
<td>443</td>
</tr>
<tr>
<td>Akhadov, T.</td>
<td>262, 514, 515, 619, 719</td>
</tr>
<tr>
<td>Akhmetzhanov, B.</td>
<td>475</td>
</tr>
<tr>
<td>Al Dahery, S.</td>
<td>529</td>
</tr>
<tr>
<td>Al Hammadi, N.</td>
<td>150, 565</td>
</tr>
<tr>
<td>Al-Mubarak, H.</td>
<td>325</td>
</tr>
<tr>
<td>Alberich, M.</td>
<td>454, 467</td>
</tr>
<tr>
<td>Alberola-López, C.</td>
<td>73, 100, 576</td>
</tr>
<tr>
<td>Albers, F.</td>
<td>120, 121</td>
</tr>
<tr>
<td>Alcázar, D.</td>
<td>486</td>
</tr>
<tr>
<td>Alentorn, A.</td>
<td>351, 690</td>
</tr>
<tr>
<td>Ali, W.</td>
<td>630</td>
</tr>
<tr>
<td>Alia, A.</td>
<td>488, 662</td>
</tr>
<tr>
<td>Alibert, E.</td>
<td>678</td>
</tr>
<tr>
<td>Allegre, L.</td>
<td>723</td>
</tr>
<tr>
<td>Almujayyaz, S.</td>
<td>261</td>
</tr>
<tr>
<td>Alonso, J.</td>
<td>467</td>
</tr>
<tr>
<td>Alsaedi, A.</td>
<td>593</td>
</tr>
<tr>
<td>Alsop, D.</td>
<td>84, 478</td>
</tr>
<tr>
<td>Álvarez-Hernández, E.</td>
<td>493</td>
</tr>
<tr>
<td>Alves, L.</td>
<td>224</td>
</tr>
<tr>
<td>Alyafeai, R.</td>
<td>454</td>
</tr>
<tr>
<td>Amant, F.</td>
<td>455</td>
</tr>
<tr>
<td>Amaro, S.</td>
<td>196</td>
</tr>
<tr>
<td>Amirrajab, S.</td>
<td>72</td>
</tr>
<tr>
<td>Ammar, M.</td>
<td>573</td>
</tr>
<tr>
<td>Amrthor, T.</td>
<td>75</td>
</tr>
<tr>
<td>Anders, J.</td>
<td>288</td>
</tr>
<tr>
<td>Anderson, S.E.</td>
<td>586</td>
</tr>
<tr>
<td>Andia, M.</td>
<td>191, 468, 688</td>
</tr>
<tr>
<td>Angelovsky, G.</td>
<td>416</td>
</tr>
<tr>
<td>Ann, C.N.</td>
<td>450</td>
</tr>
<tr>
<td>Annala, A.J.</td>
<td>449</td>
</tr>
<tr>
<td>Anton, A.</td>
<td>257</td>
</tr>
<tr>
<td>Antonelli, A.</td>
<td>225, 457</td>
</tr>
<tr>
<td>Antoni, G.</td>
<td>448</td>
</tr>
<tr>
<td>Antonov, A.</td>
<td>591, 596</td>
</tr>
<tr>
<td>Aouadi, S.</td>
<td>150, 565</td>
</tr>
<tr>
<td>Apostolopoulou, M.</td>
<td>511</td>
</tr>
<tr>
<td>Apostolopoulou, M.</td>
<td>263</td>
</tr>
<tr>
<td>Appold, S.</td>
<td>659</td>
</tr>
<tr>
<td>Aramendia-Vidaurreta, V.</td>
<td>297, 632</td>
</tr>
<tr>
<td>Araslanova, L.</td>
<td>534</td>
</tr>
<tr>
<td>Araujo, E.C.A.</td>
<td>36</td>
</tr>
<tr>
<td>Arcuri, P.P.</td>
<td>531</td>
</tr>
<tr>
<td>Arda, K.N.</td>
<td>713, 714</td>
</tr>
<tr>
<td>Arena, F.</td>
<td>14</td>
</tr>
<tr>
<td>Arezzini, S.</td>
<td>732</td>
</tr>
<tr>
<td>Arias-Ramos, N.</td>
<td>187, 520</td>
</tr>
<tr>
<td>Arik, B.</td>
<td>705, 714</td>
</tr>
<tr>
<td>Arik, S.B.</td>
<td>713</td>
</tr>
<tr>
<td>Arilyurek, C.</td>
<td>608</td>
</tr>
<tr>
<td>Arkell, R.</td>
<td>176</td>
</tr>
<tr>
<td>Arnulf, L.</td>
<td>202</td>
</tr>
<tr>
<td>Arraño Carrasco, L.</td>
<td>211</td>
</tr>
<tr>
<td>Arribarat, G.</td>
<td>30, 458</td>
</tr>
<tr>
<td>Arigo, A.</td>
<td>470</td>
</tr>
<tr>
<td>Arslan, D.B.</td>
<td>393, 626</td>
</tr>
<tr>
<td>Arslan, G.</td>
<td>131</td>
</tr>
<tr>
<td>Arteaga De Castro, C.S.</td>
<td>510</td>
</tr>
<tr>
<td>Arthur, O.</td>
<td>129</td>
</tr>
<tr>
<td>Arús, C.</td>
<td>187, 380, 507, 519, 520</td>
</tr>
<tr>
<td>Ashfaq, B.N.</td>
<td>275</td>
</tr>
<tr>
<td>Askin, N.C.</td>
<td>578</td>
</tr>
</tbody>
</table>

## B

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aslam, I.</td>
<td>136, 148, 465, 466, 575, 645</td>
</tr>
<tr>
<td>Aslanli, I.</td>
<td>198, 395, 472, 733</td>
</tr>
<tr>
<td>Atalar, E.</td>
<td>275, 283, 316, 608</td>
</tr>
<tr>
<td>Atasoy, M.M.</td>
<td>131</td>
</tr>
<tr>
<td>Atkinson, D.</td>
<td>.</td>
</tr>
<tr>
<td>Auger, C.</td>
<td>454</td>
</tr>
<tr>
<td>Austein, F.</td>
<td>391</td>
</tr>
<tr>
<td>Autret, G.</td>
<td>407</td>
</tr>
<tr>
<td>Avidnovich, N.</td>
<td>258, 268, 313</td>
</tr>
<tr>
<td>Avidnovich, N.</td>
<td>502</td>
</tr>
<tr>
<td>Ayaz, A.</td>
<td>646</td>
</tr>
<tr>
<td>Azzabou, N.</td>
<td>.</td>
</tr>
<tr>
<td>Azzabou, N.</td>
<td>.</td>
</tr>
<tr>
<td>B. W. Larsson, H.</td>
<td>459</td>
</tr>
<tr>
<td>Babb, J.</td>
<td>107</td>
</tr>
<tr>
<td>Bacher, M.</td>
<td>271, 377</td>
</tr>
<tr>
<td>Bachert, P.</td>
<td>308</td>
</tr>
<tr>
<td>Badie, B.</td>
<td>449</td>
</tr>
<tr>
<td>Baev, A.E.</td>
<td>543</td>
</tr>
<tr>
<td>Bak, Y.</td>
<td>212</td>
</tr>
<tr>
<td>Bakhmethyeva, M.I.</td>
<td>.</td>
</tr>
<tr>
<td>Balasubramanian, M.</td>
<td>425, 505</td>
</tr>
<tr>
<td>Baldo, B.</td>
<td>186</td>
</tr>
<tr>
<td>Baldwin, A.</td>
<td>447</td>
</tr>
<tr>
<td>Baledent, O.</td>
<td>204, 516, 642</td>
</tr>
<tr>
<td>Bálintová, S.</td>
<td>598</td>
</tr>
<tr>
<td>Ballester-Ortiz, G.</td>
<td>710</td>
</tr>
<tr>
<td>Ballet, S.</td>
<td>.</td>
</tr>
<tr>
<td>Balvay, D.</td>
<td>407</td>
</tr>
<tr>
<td>Bamberg, F.</td>
<td>165, 171, 234</td>
</tr>
<tr>
<td>Banciu Buonomini, F.</td>
<td>460</td>
</tr>
<tr>
<td>Banerji, A.</td>
<td>246</td>
</tr>
<tr>
<td>Bannier, E.</td>
<td>49, 441</td>
</tr>
<tr>
<td>Bano, W.</td>
<td>463</td>
</tr>
<tr>
<td>Bár, S.</td>
<td>89</td>
</tr>
<tr>
<td>Baranova, E.</td>
<td>528</td>
</tr>
<tr>
<td>Barazany, D.</td>
<td>415</td>
</tr>
<tr>
<td>Barbogallo, G.</td>
<td>458</td>
</tr>
<tr>
<td>Barbier, E.</td>
<td>453</td>
</tr>
<tr>
<td>Barbosa, F.</td>
<td>711</td>
</tr>
<tr>
<td>Bardinet, E.</td>
<td>202</td>
</tr>
<tr>
<td>Bardini, P.</td>
<td>.</td>
</tr>
<tr>
<td>Bargon, J.</td>
<td>428, 675</td>
</tr>
<tr>
<td>Barilou, C.</td>
<td>49, 441</td>
</tr>
<tr>
<td>Barker, G.J.</td>
<td>320, 422</td>
</tr>
<tr>
<td>Barkhof, F.</td>
<td>733</td>
</tr>
<tr>
<td>Barnhill, E.</td>
<td>238</td>
</tr>
</tbody>
</table>
Bussi, S.; 13
Butako, C.; 31, 200
Byk, K.; 34

C
C. Freitas, A.; 19
Caan, M.W.A.; 307, 646, 733
Cabañas, M.E.; 524
Cabella, C.; 607
Cabioglu, N.; 548
Cahova, M.; 145
Cai, W.; 278
Calado, S.; 224
Caldas, C.; 371
Calderoni, S.; 177, 628, 732
Callaghan, M.; 104
Calle, D.; 603
Calmon, R.; 351, 690
Calvo, O.P.; 389
Camaro, O.; 31, 200
Canals, S.; 663, 695
Candido, J.; 176
Candido, A.P.; 187, 495, 519, 520
Cano, D.; 632
Caporale, A.; 48, 253
Capozzi, A.; 677
Cappelle, S.; .
Cappelli, S.; 454
Capuani, S.; 48, 51, 225, 253, 457, 560
Carapelli, C.; 433
Cardoso, M.; 78, 437, 723
Carey, A.; 57
Carlier, P.; 36, 66
Carlier, P.G.; 64, 65, 67, 118
Carmichael, D.; 129, 209
Caro, C.; 496, 673
Carriero, A.; 155, 158, 655
Cartiaux, B.; .
Cartiaux, J.; 30
Caruyer, E.; 49
Carvalho, M.; 327
Carvalho, V.; 84
Casanova, A.; 407
Cassarà, A.; 155, 158, 655
Castanyer, S.; 438
Catalano, C.; 457
Caudron, J.; 295
Cavaliere, C.; 560
Cave, G.; 88
Cavusoglu, M.; 178, 243
Cazals, Y.; . 78
Cebeci, H.; . 393
Cecchi, P.; . 471
Cedersund, G.; . 53, 144, 631
Celik, L.; . 131, 131
Cengiz, S.; . 626
Cerdán García-Esteller, S.; 52, 226, 440, 562, 603
Çetin, A.E.; . 669
Chabot, J.; . 247
Chahid, A.; . 506
Chalmers, A.; 218, 325
Chamkhi, A.; . 720
Chamorro, A.; . 196
Chan, L.L.; . 450
Chanel, N.; . 332, 427
Chang, H.; . 264
Chang, H.-C.; . 725
Chang, P.; 113, 497, 501, 512, 731
Chang, Y.-W.; . 532
Chao, T.-C.; . 725
Chappell, M.; 242, 245, 447
Chatell, J.-F.; . 42
Chatel, B.; . 686
Chauert, B.; . 516, 720, 721
Chen, C.; . 257
Chen, C.-L.; 173, 435
Chen, J.-H.; . 667
Chen, M.-J.; 228, 264
Chen, P.-Y.; 173, 435
Chen, Y.; .
Chen, Y.-F.; . 197
Chen, Y.-J.; 172, 384
Chendo, I.; 327, 588
Cheng, P.-W.; . 667
Cheong, R.; . 186
Cherix, A.; . 485
Chervakov, P.; . 277
Chervyakova, O.; . 474, 716, 717
Cheung, S.M.; 370, 372, 374
Chhabra, A.; . 371
Chiang, H.-H.; . 228, 264
Chinnaiyan, A.; . 640
Chiuhe, T.-D.; . 667
Chlopicki, S.; . 34
Cho, J.Y.; . 539, 706
Cho, K.-H.; . 228, 264
Chodorowski, A.; . 352, 693
Choe, B.-Y.; . 99, 193, 513, 518, 523, 618
Choi, C.-H.; 40, 228, 264, 265, 277, 284, 301, 612
Chombar, J.P.; . 516, 721
Choo, H.J.; . 69, 154
Christiaen, E.; . 207
Chyrssochou, C.; . 246
Chu, Y.-H.; . 317, 568, 570
Chuhutin, A.; . 430
Chung, H.-W.; . 328, 725
Chupakhin, A.; 557, 591, 595, 596
Ciampa, A.; . 732
Ciancia, V.; . 460
Ciccocioppo, R.; . 663, 695
Cigler, P.; . 16
Ciobanu, L.; . 240
Cioni, G.; . 471
Ciritsis, A.; . 540, 627
Clare, S.; . 378, 381
Clark, C.A.; . 434, 492
Clarke, W.T.; . 281
Clement, P.; . 399, 401
Clément, J.; . 272
Clément, O.; . 407
Clery, J.; . 436
Clofent Sanchez, G.; . 410
Cluzel, P.; . 357
Coillet, C.; . 653, 678
Colle, R.; . 585
Colombo Serra, S.; 13, 43, 607
Combes, B.; . 441
Comert, R.G.; . 548, 550
Commowick, O.; . 49
Compter, I.; . 319
Conen, S.; . 257
Confort-Gouny, S.; . 446
Connolly, J.; . 199
Constans, J.-M.; . 204, 516, 642, 720, 721
Copel, L.; . 134
Coppa, B.; . 64, 65
Coppo, A.; . 13
Corcy, C.; . 516
Cordero-Grande, L.; . 576
Cornelis Jacominus, V.D.B.; 62
Corot, C.; . 15
Corryle, E.; . 585
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engel, E.-M.</td>
<td>71, 126</td>
</tr>
<tr>
<td>Engel, M.</td>
<td>183</td>
</tr>
<tr>
<td>Engström, M.</td>
<td>232</td>
</tr>
<tr>
<td>Enoch, S.</td>
<td>292</td>
</tr>
<tr>
<td>Entezari, A.</td>
<td>214</td>
</tr>
<tr>
<td>Entz, L.</td>
<td>355</td>
</tr>
<tr>
<td>Er, A.</td>
<td>533</td>
</tr>
<tr>
<td>Erb, M.</td>
<td>87</td>
</tr>
<tr>
<td>Erdogdu, E.</td>
<td>626</td>
</tr>
<tr>
<td>Eren, O.C.</td>
<td>446</td>
</tr>
<tr>
<td>Faller, A.</td>
<td>238</td>
</tr>
<tr>
<td>Farkas, L.</td>
<td>287</td>
</tr>
<tr>
<td>Felder, J.</td>
<td>230</td>
</tr>
<tr>
<td>Fendel, M.</td>
<td>271, 377</td>
</tr>
<tr>
<td>Fernández, J.</td>
<td>677</td>
</tr>
<tr>
<td>Fernández, B.</td>
<td>124, 128</td>
</tr>
<tr>
<td>Ferranti, S.</td>
<td>471</td>
</tr>
<tr>
<td>Ferrari, E.</td>
<td>230</td>
</tr>
<tr>
<td>Ferrara, A.</td>
<td>628</td>
</tr>
<tr>
<td>Ferrauto, G.</td>
<td>281</td>
</tr>
<tr>
<td>Ferreira, A.</td>
<td>336</td>
</tr>
<tr>
<td>Ferrer Font, L.</td>
<td>520</td>
</tr>
<tr>
<td>Ferrer-Font, L.</td>
<td>187</td>
</tr>
<tr>
<td>Ferri, F.</td>
<td>516</td>
</tr>
<tr>
<td>Ferré, J.-C.</td>
<td>441</td>
</tr>
<tr>
<td>Fessler, J.A.</td>
<td>681</td>
</tr>
<tr>
<td>Fichten, A.</td>
<td>516</td>
</tr>
<tr>
<td>Fichtner, N.</td>
<td>258, 379</td>
</tr>
<tr>
<td>Figueiredo, P.</td>
<td>351, 634</td>
</tr>
<tr>
<td>Figueiredo-Dias, L.</td>
<td>710</td>
</tr>
<tr>
<td>Filipe, J.P.</td>
<td>700</td>
</tr>
<tr>
<td>Fillion, V.D.</td>
<td>606</td>
</tr>
<tr>
<td>Filss, C.</td>
<td>255</td>
</tr>
<tr>
<td>Finas, M.</td>
<td>295</td>
</tr>
<tr>
<td>Fingerhut, S.</td>
<td>15</td>
</tr>
<tr>
<td>Finkenstaedt, T.</td>
<td>50</td>
</tr>
<tr>
<td>Fiori, S.</td>
<td>471</td>
</tr>
<tr>
<td>Flassbeck, M.</td>
<td>308</td>
</tr>
<tr>
<td>Flögel, U.</td>
<td>77, 493</td>
</tr>
<tr>
<td>Flores, D.</td>
<td>601</td>
</tr>
<tr>
<td>Flowers, C.</td>
<td>445</td>
</tr>
<tr>
<td>Fodero, G.</td>
<td>531</td>
</tr>
<tr>
<td>Fogassi, L.</td>
<td>230</td>
</tr>
<tr>
<td>Fokin, V.</td>
<td>208, 213</td>
</tr>
<tr>
<td>Foley, K.</td>
<td>709</td>
</tr>
<tr>
<td>Fonseca, J.</td>
<td>700</td>
</tr>
<tr>
<td>Forder, J.R.</td>
<td>214</td>
</tr>
<tr>
<td>Forloni, G.</td>
<td>43</td>
</tr>
<tr>
<td>Forman, C.</td>
<td>692</td>
</tr>
<tr>
<td>Forsgren, M.F.</td>
<td>144, 631</td>
</tr>
<tr>
<td>Forgette, C.</td>
<td>720</td>
</tr>
<tr>
<td>Fourt, G.</td>
<td>240</td>
</tr>
<tr>
<td>Fouré, A.</td>
<td>584</td>
</tr>
<tr>
<td>Fouto, A.</td>
<td>224</td>
</tr>
<tr>
<td>Fracasso, A.</td>
<td>307, 646</td>
</tr>
<tr>
<td>Frahm, J.</td>
<td>28, 180, 188, 305, 309, 344, 432, 480</td>
</tr>
<tr>
<td>Fraimbault, V.</td>
<td>13</td>
</tr>
<tr>
<td>Franconi, F.</td>
<td>670</td>
</tr>
<tr>
<td>Frandon, J.</td>
<td>295</td>
</tr>
<tr>
<td>Frankel, P.</td>
<td>449</td>
</tr>
<tr>
<td>Frantsev, D.</td>
<td>153, 541, 542</td>
</tr>
<tr>
<td>Frass-Kriegel, R.</td>
<td>59, 311, 315, 676</td>
</tr>
<tr>
<td>Freitas, A.</td>
<td>22</td>
</tr>
<tr>
<td>Fretellier, N.</td>
<td>579, 609, 611, 654</td>
</tr>
<tr>
<td>Friedrich, F.</td>
<td>308</td>
</tr>
<tr>
<td>Fries, P.</td>
<td>326</td>
</tr>
<tr>
<td>Fringuellu Mingo, A.</td>
<td>607</td>
</tr>
<tr>
<td>Fritsche, A.</td>
<td>174</td>
</tr>
<tr>
<td>Froesel, M.</td>
<td>436</td>
</tr>
<tr>
<td>Froidevaux, R.</td>
<td>303, 310</td>
</tr>
<tr>
<td>Frollo, I.</td>
<td>261</td>
</tr>
<tr>
<td>Fromes, Y.</td>
<td>36</td>
</tr>
<tr>
<td>Frost, R.</td>
<td>306</td>
</tr>
<tr>
<td>Frouin, F.</td>
<td>351, 690</td>
</tr>
<tr>
<td>Frouin, V.</td>
<td>351, 690</td>
</tr>
<tr>
<td>Frydrychowicz, A.</td>
<td>23</td>
</tr>
<tr>
<td>Fuenzalida, K.</td>
<td>191, 688</td>
</tr>
<tr>
<td>Furukawa, A.</td>
<td>599, 605</td>
</tr>
<tr>
<td>Fuster-Garcia, E.</td>
<td>738, 739</td>
</tr>
</tbody>
</table>

**G**

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaa, T.</td>
<td>269</td>
</tr>
<tr>
<td>Gaborit, G.</td>
<td>58, 314</td>
</tr>
<tr>
<td>Gadmar, O.B.</td>
<td>462</td>
</tr>
<tr>
<td>Gadzhieva, Z.</td>
<td>475</td>
</tr>
<tr>
<td>Gajdosik, M.</td>
<td>311</td>
</tr>
<tr>
<td>Galanaud, D.</td>
<td>453</td>
</tr>
<tr>
<td>Galisova, A.</td>
<td>81, 412, 426</td>
</tr>
<tr>
<td>Gallagher, F.</td>
<td>371</td>
</tr>
<tr>
<td>Gallagher, L.</td>
<td>244, 325</td>
</tr>
<tr>
<td>Gallea, C.</td>
<td>202</td>
</tr>
<tr>
<td>Galez, B.</td>
<td>670</td>
</tr>
<tr>
<td>Galmiche, A.</td>
<td>516</td>
</tr>
<tr>
<td>Gambardella, G.</td>
<td>157, 470</td>
</tr>
<tr>
<td>Gandy, S.</td>
<td>250</td>
</tr>
<tr>
<td>García Valenzuela, M.</td>
<td>211</td>
</tr>
<tr>
<td>García Ferrando, G.A.</td>
<td>738</td>
</tr>
<tr>
<td>García-Durás, M.</td>
<td>521</td>
</tr>
<tr>
<td>García-Gómez, J.M.</td>
<td>738, 739</td>
</tr>
</tbody>
</table>
Author Index

Heidemann, R.; 123, 574
Heiland, S.; 321
Heindel, W.; 490
Heine, M.; . 26
Heintz, A.; 516, 720, 721
Hejlova, I.; 145
Hejtmank, L.; 641
Heldmann, S.; 360
Hell, E.; 288
Helle, B.; 123, 483, 574
Henninger, B.; 617
Henrik Ardenkjaer-Larsen, J.; . 156, 184, 320, 333, 334, 335, 422, 558, 580, 583
Hernández Villagas, Y.; 380
Hernández, J.; 280
Herald, V.; 638, 672
Herrmann, T.; 423
Hervas, A.; 637
Herynek, V.; 412, 589
Herz, K.; . 91
Heskamp, L.; 582
Hess, A.; 282
Hesterman, J.; 176
Hetzker, S.; 238
Heys, S.; 370, 372, 373, 374
Hiba, B.; 29, 436
Hikishima, K.; 602
Hilaman, R.; 671
Hilsden, H.; . 66
Hirano, M.; 552
Hirsch, S.; 238
Hnilicová, P.; 598
Ho, R.; 199
Hoad, C.; . 88
Hock, A.; 517
Hoeffemmer, M.; 503
Hoehn, M.; 33
Hoffmann, A.; 319
Hofheinz, F.; 395
Holmes, W.; 325
Holler, M.; . 25
Holmes, W.; 218, 244
Holst, K.; 298
Holst, P.; 617
Hong, S.S.; 532
Hoogduin, H.; .
Horne, A.; 288
Hosseini, E.; 676
Hosseinnezhadian, S.; 315
Houessinon, A.; 516
Hruby, M.; 81, 426
Hsu, Y.-C.; . 172, 173, 220, 384, 435, 568, 570
Hu, H.H.; 63
Huang, C.-F.; 384
Huang, J.-Y.; 172
Huber, J.; 567
Hubberts, S.; 105
Huck, P.; 89
Huellner, M.; 711
Hui, E.S.; 622
Huisman, H.; 353, 361
Humhej, I.; 589
Hurley, S.A.; 378
Hursthaken, A.A.; 60, 292
Husain, E.; 370, 372, 373, 374
Hwang, J.; 532
Hwang, J.-H.; 77, 493, 511
Hwang, T.-J.; . 172
Hwu, H.-G.; . 172
Hyacinthe, J.-N.; . 80
Ibrahim, I.; . 233, 589, 641
Içer, S.; 590
Ichiba, Y.; 552
Ider, Y.Z.; 608
Idée, J.-M.; . 12, 15
Ifergan, G.; 407
Ignatova, S.; 144
Illa, M.; 524
Illanes, A.; . 611, 654
Ilicak, E.; 669
Iamamura, R.; 443
In T Zandt, R.; . 504, 666
In, M.-H.; . 126
Inam, O.; . 175, 348, 464, 644, 647
Incakara, F.; . 320, 422
Ingrisch, M.; . 216, 406, 625
Iordanishvili, E.; . 479
Ipek, O.; . 117, 272, 677
Isanova, E.; . 591, 595, 596
Iskum, I.; . 137, 159
Ito, S.; . 95, 96
Ittnner, L.; . 356
Ivanova, N.; 208
Ivantsova, A.; . 262
J
Jacobin Valat, M.-J.; . 410
Jacobsen, N.; . 694
Jacquier, A.; . 295, 302
Jafari, R.; . 247
Jafarinosar, G.; . 561
Jaffray, D.; . 383, 526
Jahn, A.; . 77
Jakob, P.; . 3, 110, 111, 359, 638, 672
Jambawalkar, S.; . 247
Janewicz, M.; . 522
Jansen, F.; . 203
Jansen, O.; . 391, 402
Janssen, F.; . 319
Jaschke, W.; . 143
Jasiński, K.; . 491, 600
Jasztal, A.; . 34
Javed, Z.; . 466
Jayasekera, G.; . 133, 300
Jelenik, T.; . 493
Jensen, T.; . 636
Jeong, K.; . 345
Jeong, H.; . 282
Jeong, K.; . 345
Jespersen, M.; . 300
Jespersen, S.; . 8
Jespersen, S.N.; . 430
Jeurissen, B.; . 396
Jezzard, P.; . 282, 447
Jia, F.; . 317, 730
### Author Index

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuijjer, J.</td>
<td>733</td>
</tr>
<tr>
<td>Kujawara, A.</td>
<td>417</td>
</tr>
<tr>
<td>Kumar, S.</td>
<td>423</td>
</tr>
<tr>
<td>Kunz, N.</td>
<td>192</td>
</tr>
<tr>
<td>Kuo, L.-W.</td>
<td>228, 264</td>
</tr>
<tr>
<td>Kuo, Y.-S.</td>
<td>197</td>
</tr>
<tr>
<td>Kupriyanov, D.</td>
<td>534</td>
</tr>
<tr>
<td>Kurz, F.</td>
<td>321, 338, 400, 481</td>
</tr>
<tr>
<td>Kurzendorfer, T.</td>
<td>692</td>
</tr>
<tr>
<td>Kusma, S.</td>
<td>357</td>
</tr>
<tr>
<td>Küstner, T.</td>
<td>311, 241</td>
</tr>
<tr>
<td>Kwan, J.S.</td>
<td>622</td>
</tr>
<tr>
<td>Kwela, J.</td>
<td>563</td>
</tr>
<tr>
<td>Kyathanahally, S.P.K.</td>
<td>380</td>
</tr>
<tr>
<td>Kuijer, J.</td>
<td>409</td>
</tr>
<tr>
<td>L'Aloumaine, C.</td>
<td>587</td>
</tr>
<tr>
<td>Laboulais, A.</td>
<td>78</td>
</tr>
<tr>
<td>Labriet, H.</td>
<td>83</td>
</tr>
<tr>
<td>Ladd, M.</td>
<td>278</td>
</tr>
<tr>
<td>Ladd, M.E.</td>
<td>308</td>
</tr>
<tr>
<td>Laganà, D.</td>
<td>531</td>
</tr>
<tr>
<td>Lagerstrand, K.</td>
<td>352</td>
</tr>
<tr>
<td>Lahrech, H.</td>
<td>326</td>
</tr>
<tr>
<td>Laistler, E.</td>
<td>59, 311, 315, 676</td>
</tr>
<tr>
<td>Lalou, A.</td>
<td>407</td>
</tr>
<tr>
<td>Lamb, D.</td>
<td>720</td>
</tr>
<tr>
<td>Lamberts, H.</td>
<td>121</td>
</tr>
<tr>
<td>Lambert, S.</td>
<td>61, 182</td>
</tr>
<tr>
<td>Lambert, S.A.</td>
<td>304</td>
</tr>
<tr>
<td>Lamberton, F.</td>
<td>436</td>
</tr>
<tr>
<td>Lambin, P.</td>
<td>319</td>
</tr>
<tr>
<td>Lamy, J.</td>
<td>456</td>
</tr>
<tr>
<td>Langen, K.-J.</td>
<td>112, 255, 336, 400, 409</td>
</tr>
<tr>
<td>Langfort, J.</td>
<td>259</td>
</tr>
<tr>
<td>Langkammer, C.</td>
<td>337, 665</td>
</tr>
<tr>
<td>Lanz, B.</td>
<td>192, 257</td>
</tr>
<tr>
<td>Lanz, T.</td>
<td>261, 371</td>
</tr>
<tr>
<td>Lanzman, R.S.</td>
<td>414</td>
</tr>
<tr>
<td>Lapteva, M.</td>
<td>153, 541</td>
</tr>
<tr>
<td>Lara-Rios, J.</td>
<td>710</td>
</tr>
<tr>
<td>Laredo, C.</td>
<td>196</td>
</tr>
<tr>
<td>Larivière, M.</td>
<td>410</td>
</tr>
<tr>
<td>Laroché Traineau, J.</td>
<td>410</td>
</tr>
<tr>
<td>Larrat, B.</td>
<td>292</td>
</tr>
<tr>
<td>Larsson, E.-M.</td>
<td>232, 448</td>
</tr>
<tr>
<td>Lasbleiz, J.</td>
<td>157</td>
</tr>
<tr>
<td>Lasic, S.</td>
<td>429</td>
</tr>
<tr>
<td>Lassen, M.</td>
<td>299</td>
</tr>
<tr>
<td>Latella, D.</td>
<td>460</td>
</tr>
<tr>
<td>Lätt, J.</td>
<td>624</td>
</tr>
<tr>
<td>Latta, P.</td>
<td>93</td>
</tr>
<tr>
<td>Lattuada, L.</td>
<td>607</td>
</tr>
<tr>
<td>Laub, P.</td>
<td>677</td>
</tr>
<tr>
<td>Laule, C.</td>
<td>442</td>
</tr>
<tr>
<td>Laustsen, C.</td>
<td>237</td>
</tr>
<tr>
<td>Law, I.</td>
<td>389, 459</td>
</tr>
<tr>
<td>Layton, K.</td>
<td>730</td>
</tr>
<tr>
<td>Lazar, R.</td>
<td>198</td>
</tr>
<tr>
<td>Lazeyras, F.</td>
<td>578</td>
</tr>
<tr>
<td>Le Bars, E.</td>
<td>231</td>
</tr>
<tr>
<td>Le Bihan, D.</td>
<td>240</td>
</tr>
<tr>
<td>Le Fur, Y.</td>
<td>487</td>
</tr>
<tr>
<td>Le Gars, D.</td>
<td>516, 721</td>
</tr>
<tr>
<td>Le Ster, C.</td>
<td>157</td>
</tr>
<tr>
<td>Le Trotier, A.</td>
<td>446, 478, 584</td>
</tr>
<tr>
<td>Leale, G.</td>
<td>155, 158, 655</td>
</tr>
<tr>
<td>Lechea, N.</td>
<td>112</td>
</tr>
<tr>
<td>Lecler, A.</td>
<td>407</td>
</tr>
<tr>
<td>Lee, C.</td>
<td>423</td>
</tr>
<tr>
<td>Lee, M.-Y.</td>
<td>99, 193, 523</td>
</tr>
<tr>
<td>Lee, P.H.</td>
<td>212</td>
</tr>
<tr>
<td>Lee, S.-K.</td>
<td>212</td>
</tr>
<tr>
<td>Lee, S.J.</td>
<td>69, 154</td>
</tr>
<tr>
<td>Leemans, A.</td>
<td>47, 215, 223, 431</td>
</tr>
<tr>
<td>Lefebvre, P.M.</td>
<td>182, 304, 616</td>
</tr>
<tr>
<td>Lefranc, M.</td>
<td>516, 720, 721</td>
</tr>
<tr>
<td>Legostaeva, L.</td>
<td>451, 474, 716, 717</td>
</tr>
<tr>
<td>Lehetský, J.</td>
<td>598</td>
</tr>
<tr>
<td>Lehericy, S.</td>
<td>202</td>
</tr>
<tr>
<td>Lei, H.</td>
<td>485, 525, 677</td>
</tr>
<tr>
<td>Leiner, T.</td>
<td>137, 420</td>
</tr>
<tr>
<td>Lemaire, L.</td>
<td>670</td>
</tr>
<tr>
<td>Lendak, D.</td>
<td>658</td>
</tr>
<tr>
<td>Leroi, L.</td>
<td>456</td>
</tr>
<tr>
<td>Leuchs, L.</td>
<td>128</td>
</tr>
<tr>
<td>Leupold, J.</td>
<td>89, 730</td>
</tr>
<tr>
<td>Leussler, C.</td>
<td>310</td>
</tr>
<tr>
<td>Levy, P.</td>
<td>327</td>
</tr>
<tr>
<td>Liao, Y.</td>
<td>112</td>
</tr>
<tr>
<td>Liddle, P.F.</td>
<td>257</td>
</tr>
<tr>
<td>Lidouren, F.</td>
<td>35</td>
</tr>
<tr>
<td>Liebgott, A.</td>
<td>171</td>
</tr>
<tr>
<td>Liebig, P.</td>
<td>123, 574</td>
</tr>
<tr>
<td>Lim, S.-I.</td>
<td>193, 513, 518, 523, 618</td>
</tr>
<tr>
<td>Lim, S.L.L.</td>
<td>450</td>
</tr>
<tr>
<td>Lin, F.-H.</td>
<td>568, 570</td>
</tr>
<tr>
<td>Lin, J.-M.</td>
<td>725</td>
</tr>
<tr>
<td>Lin, T.</td>
<td>247</td>
</tr>
<tr>
<td>Lindberg, U.</td>
<td>389</td>
</tr>
<tr>
<td>Lindboom, L.</td>
<td>152</td>
</tr>
<tr>
<td>Lindemeyer, J.</td>
<td>106, 112</td>
</tr>
<tr>
<td>Lindner, T.</td>
<td>391, 402</td>
</tr>
<tr>
<td>Linke, F.</td>
<td>411</td>
</tr>
<tr>
<td>Linn, J.</td>
<td>659</td>
</tr>
<tr>
<td>Liro, M.</td>
<td>146</td>
</tr>
<tr>
<td>Littin, S.</td>
<td>317, 730</td>
</tr>
<tr>
<td>Litvinenko, A.</td>
<td>213</td>
</tr>
<tr>
<td>Liu, C.-M.</td>
<td>172</td>
</tr>
<tr>
<td>Liu, H.K.</td>
<td>442</td>
</tr>
<tr>
<td>Lizarbe, B.</td>
<td>485, 525</td>
</tr>
<tr>
<td>Ljungberg, E.</td>
<td>442</td>
</tr>
<tr>
<td>Lladó, X.</td>
<td>467</td>
</tr>
<tr>
<td>Llorca, A.</td>
<td>664</td>
</tr>
<tr>
<td>Łockiewicz, M.</td>
<td>704</td>
</tr>
<tr>
<td>Loewe, C.</td>
<td>294, 299</td>
</tr>
<tr>
<td>Loktyushin, A.</td>
<td>270</td>
</tr>
<tr>
<td>Lorna, D.</td>
<td>371</td>
</tr>
<tr>
<td>Lonjon, N.</td>
<td>437</td>
</tr>
<tr>
<td>Lope-Piedra ta S.</td>
<td>187, 520</td>
</tr>
<tr>
<td>Lopez Kolkovsky, A.</td>
<td>67</td>
</tr>
<tr>
<td>Lopez, E.</td>
<td>614</td>
</tr>
<tr>
<td>López-Gil, X.</td>
<td>32, 489</td>
</tr>
<tr>
<td>López-Larrubia, P.</td>
<td>52, 226, 486, 562, 603, 604</td>
</tr>
<tr>
<td>Loreira, C.</td>
<td>524</td>
</tr>
<tr>
<td>Lorenzato, C.</td>
<td>410</td>
</tr>
<tr>
<td>Lorton, O.</td>
<td>80</td>
</tr>
<tr>
<td>Loucao, R.</td>
<td>336</td>
</tr>
<tr>
<td>Loureiro De Sousa, P.</td>
<td>456</td>
</tr>
<tr>
<td>Lubberink, M.</td>
<td>448</td>
</tr>
<tr>
<td>Ludwig, H.-C.</td>
<td>480</td>
</tr>
<tr>
<td>Luechinger, R.</td>
<td>310</td>
</tr>
<tr>
<td>Luijten, P.</td>
<td>92, 510</td>
</tr>
<tr>
<td>Luis, E.</td>
<td>205</td>
</tr>
<tr>
<td>Lukyanenok, P.I.</td>
<td>543</td>
</tr>
<tr>
<td>Lundberg, P.</td>
<td>53, 144, 631, 685</td>
</tr>
<tr>
<td>Lundbom, J.</td>
<td>263</td>
</tr>
<tr>
<td>Lundemann Jensen, M.</td>
<td>617</td>
</tr>
<tr>
<td>Lundemann, M.</td>
<td>459</td>
</tr>
<tr>
<td>Lundervold, A.</td>
<td>406</td>
</tr>
<tr>
<td>Lurie, D.</td>
<td>56</td>
</tr>
</tbody>
</table>
Reisert, M.; 195, 737
Reishofer, G.; 25
Remotti, H.; 247
Reneman, L.; 733
Renú, A.; 196
Ressler, J.; 449
Restuccia, M.; 56
Ross, P.J.; 56
Rossi, C.; 50, 149, 540, 627
Rostrup, E.; 389
Rotenberg, S.; 585
Roth, J.; 490
Rothe, M.; 77, 493
Roumans, K.H.M.; 152
Roumes, H.; 42, 190
Rovira, A.; 387, 454, 467
Rowe, I.; 239
Rowland, B.; 498, 734
Roy, U.; 488, 662
Royuela-Del-Val, J.; 73, 100, 576
Ruan, S.; 516
Rubino, G.; 460
Rudas, G.; 355
Rudiloso, S.; 196
Ruetten, P.; 18, 20
Ruiz Sauri, A.; 637
Ruiz-España, S.; 663, 695
Rumpel, H.; 450
Rund, A.; 564
Rusak, G.; 564
Rusak, G.E.; 140
Ruschke, S.; 63
Ruthven, M.; 19, 22
Rützel, F.; 484
Ruyters, G.; 74
Ryabinkina, Y.; 474, 716, 717
Rydlo, J.; 233, 641
Rymareva, Y.; 596
Ryumshina, N.I.; 630
Rymshina, N.I.; 576
Sabisz, A.; 563, 704
Sablonq, R.; 58, 314
Saborouix, P.; 292
Sabry, A.; 630
Sack, I.; 238
Sadeghi Tarakameh, A.; 316
Sahoo, P.; 254, 449, 636
Saint-James, H.; 157, 470
Saint-Martin, G.; 437
Sairanen, V.; 47
Saito, K.; 552
Salim, G.; 580
Salo, R.; 122
Salomir, R.; 80
Salvati, R.; 189
Sämann, P.; 128
Samy, M.; 630
San-Román, L.; 196
Sanal, H.T.; 705, 71
Sanchez, H.; 285, 286
Sánchez, H.; 679
Sánchez-Izquierdo, H.; 280, 671
Sanchez, S.; 42, 189
Sanio, I.; 58, 61, 314
Sanjuan Tomas, A.; 661
Sanroma, G.; 200
Santarelli, X.; 410
Santin, M.; 456
Santos Diaz, A.; 260, 620
Sapoval, M.; 407
Sappey-Marinier, D.; 469, 572
Saritas, E.U.; 613, 669
Saroma, G.; 31
Sasaki, E.; 599, 602, 605
Sasaki, Y.; 95
Sasson, E.; 134
Sastre-Garriga, J.; 454
Sattaluri, S.J.; 697, 701, 703
Savello, N.V.; 17
Savello, A.; 591, 596
Schaaf, C.; 404, 544
Schaaf, M.; 662
Schad, L.R.; 105, 142, 269
Schaefer, G.; 640, 650
Schall, M.; 479
Scharfetter, H.; 55
Scheenen, T.; 424
Scheffer, K.; 54, 71, 91, 126, 256, 270, 317, 416
Schick, F.; 87, 171, 174, 241
Schimanowsky, N.; 527
Schimpf, R.; 678
Schittenhelm, J.; 324
Schlemmer, H.P.; 163, 321, 338, 400, 481
Schloegl, M.; 25
Schmid, F.; 120
Schmid, T.; 310
Schmid, V.J.; 406
Schmidt, J.L.; 720
Schmidt, M.; 692
Schmid, V.J.; 406
Schmücke, J.; 273
Schnabel, J.A.; 160
Schnackenburg, B.; 77
Schneider, M.J.; 216, 406, 625
Scholz, S.; 650
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strzemecki, D.</td>
<td>634</td>
</tr>
<tr>
<td>Sturm, V.</td>
<td>321, 400, 481</td>
</tr>
<tr>
<td>Sturzenegger, U.</td>
<td>310</td>
</tr>
<tr>
<td>Subbotina, O.</td>
<td>536</td>
</tr>
<tr>
<td>Sugny, D.</td>
<td>182, 304</td>
</tr>
<tr>
<td>Suh, T.-S.</td>
<td>99</td>
</tr>
<tr>
<td>Sukhovei, L.</td>
<td>155, 158, 655</td>
</tr>
<tr>
<td>Sukupova, L.</td>
<td>403</td>
</tr>
<tr>
<td>Sun, J.</td>
<td>214</td>
</tr>
<tr>
<td>Sunaert, S.</td>
<td>455</td>
</tr>
<tr>
<td>Sundgren, P.</td>
<td>624</td>
</tr>
<tr>
<td>Suponeva, N.</td>
<td>451, 474, 716, 717</td>
</tr>
<tr>
<td>Suprano, I.</td>
<td>572</td>
</tr>
<tr>
<td>Suslin, A.</td>
<td>451</td>
</tr>
<tr>
<td>Sutherland, B.</td>
<td>447</td>
</tr>
<tr>
<td>Swakoń, J.</td>
<td>491</td>
</tr>
<tr>
<td>Szwatkiewicz, M.</td>
<td>38</td>
</tr>
<tr>
<td>Syka, J.</td>
<td>233</td>
</tr>
<tr>
<td>Symms, M.R.</td>
<td>276</td>
</tr>
<tr>
<td>Synowitz, M.</td>
<td>402</td>
</tr>
<tr>
<td>Szczylık, C.</td>
<td>634</td>
</tr>
<tr>
<td>Szczypinski, P.</td>
<td>405, 556</td>
</tr>
<tr>
<td>Szendroedi, J.</td>
<td>77, 263, 493</td>
</tr>
<tr>
<td>Szurowska, E.</td>
<td>563, 704</td>
</tr>
</tbody>
</table>

**T**

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Kristensen, A.</td>
<td>617</td>
</tr>
<tr>
<td>Tajima, Y.</td>
<td>552</td>
</tr>
<tr>
<td>Takashima, H.</td>
<td>443</td>
</tr>
<tr>
<td>Takebayashi, T.</td>
<td>443</td>
</tr>
<tr>
<td>Tamburini, E.</td>
<td>732</td>
</tr>
<tr>
<td>Tan, Z.</td>
<td>180, 305, 344</td>
</tr>
<tr>
<td>Tanabe, Y.</td>
<td>699</td>
</tr>
<tr>
<td>Tang, S.-C.</td>
<td>197</td>
</tr>
<tr>
<td>Tapia, L.</td>
<td>468</td>
</tr>
<tr>
<td>Tapper, S.</td>
<td>685</td>
</tr>
<tr>
<td>Tarachkova, E.</td>
<td>151, 527</td>
</tr>
<tr>
<td>Taraginha, S.</td>
<td>283</td>
</tr>
<tr>
<td>Tarantino, U.</td>
<td>51</td>
</tr>
<tr>
<td>Tasar, M.</td>
<td>705, 713, 714</td>
</tr>
<tr>
<td>Tasdelen, B.</td>
<td>608</td>
</tr>
<tr>
<td>Taşkıncı, F.</td>
<td>132</td>
</tr>
<tr>
<td>Tassani, S.</td>
<td>31, 200</td>
</tr>
<tr>
<td>Tavares, I.</td>
<td>604</td>
</tr>
<tr>
<td>Tavares, M.</td>
<td>327, 588</td>
</tr>
<tr>
<td>Tax, C.</td>
<td>223</td>
</tr>
<tr>
<td>Tax, O.M.W.</td>
<td>47</td>
</tr>
<tr>
<td>Tedoldi, F.</td>
<td>13, 607</td>
</tr>
<tr>
<td>Teh, P.Y.</td>
<td>450</td>
</tr>
<tr>
<td>Tejos, C.</td>
<td>337, 649, 727</td>
</tr>
<tr>
<td>Ter Voert, E.</td>
<td>711</td>
</tr>
<tr>
<td>Terbetas, G.</td>
<td>718</td>
</tr>
<tr>
<td>Terheyden, J.H.</td>
<td>273</td>
</tr>
<tr>
<td>Ternovoy, S.</td>
<td>621</td>
</tr>
<tr>
<td>Terrettaz, J.</td>
<td>13</td>
</tr>
<tr>
<td>Ters, J.</td>
<td>312</td>
</tr>
<tr>
<td>Teruel, J.R.</td>
<td>222</td>
</tr>
<tr>
<td>Testelin, S.</td>
<td>204</td>
</tr>
<tr>
<td>Thali, M.</td>
<td>517</td>
</tr>
<tr>
<td>Thapa, B.</td>
<td>345</td>
</tr>
<tr>
<td>Thelwall, P.E.</td>
<td>445</td>
</tr>
<tr>
<td>Thiebaut De Schotten, M.</td>
<td>365</td>
</tr>
<tr>
<td>Thomas, N.R.</td>
<td>411</td>
</tr>
<tr>
<td>Thomas, S.</td>
<td>105</td>
</tr>
<tr>
<td>Thorwarth, D.</td>
<td>587</td>
</tr>
<tr>
<td>Thureau, P.</td>
<td>84</td>
</tr>
<tr>
<td>Tian, R.</td>
<td>183, 346</td>
</tr>
<tr>
<td>Tiberi, G.</td>
<td>276</td>
</tr>
<tr>
<td>Tillmanns, C.</td>
<td>692</td>
</tr>
<tr>
<td>Tintera, J.</td>
<td>233, 403, 589, 641</td>
</tr>
<tr>
<td>Tintoré, M.</td>
<td>454</td>
</tr>
<tr>
<td>Tisell, A.</td>
<td>53, 684, 685</td>
</tr>
<tr>
<td>Tissier, R.</td>
<td>35</td>
</tr>
<tr>
<td>Tofghi, M.</td>
<td>669</td>
</tr>
<tr>
<td>Töger, J.</td>
<td>98</td>
</tr>
<tr>
<td>Tokgoz, N.</td>
<td>68</td>
</tr>
<tr>
<td>Toktas, Y.</td>
<td>548</td>
</tr>
<tr>
<td>Tokuyue, K.</td>
<td>552</td>
</tr>
<tr>
<td>Tolomeo, D.</td>
<td>43</td>
</tr>
<tr>
<td>Tongeren, L.V.</td>
<td>636</td>
</tr>
<tr>
<td>Torfeh, T.</td>
<td>150, 565</td>
</tr>
<tr>
<td>Torraldeia, F.</td>
<td>76</td>
</tr>
<tr>
<td>Torron, R.</td>
<td>66</td>
</tr>
<tr>
<td>Tosetti, M.</td>
<td>276, 471, 732</td>
</tr>
<tr>
<td>Tounekti, S.</td>
<td>436</td>
</tr>
<tr>
<td>Tourais, J.</td>
<td>551</td>
</tr>
<tr>
<td>Tourdas, T.</td>
<td>29</td>
</tr>
<tr>
<td>Toussaint, P.</td>
<td>516, 721</td>
</tr>
<tr>
<td>Tracey, I.</td>
<td>242, 381</td>
</tr>
<tr>
<td>Tran Dong, M.N.T.K.</td>
<td>210, 585</td>
</tr>
<tr>
<td>Tran-Gia, J.</td>
<td>484</td>
</tr>
<tr>
<td>Trantzhcel, T.</td>
<td>428</td>
</tr>
<tr>
<td>Triphan, S.M.F.</td>
<td>321</td>
</tr>
<tr>
<td>Trisoglio, A.</td>
<td>155, 158, 655</td>
</tr>
<tr>
<td>Troalen, T.</td>
<td>302, 436</td>
</tr>
<tr>
<td>Troost, E.</td>
<td>659</td>
</tr>
<tr>
<td>Trufanov, G.</td>
<td>208</td>
</tr>
<tr>
<td>Trunekova, P.</td>
<td>145</td>
</tr>
<tr>
<td>Tsai, S.-Y.</td>
<td>725</td>
</tr>
</tbody>
</table>

**V**

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tse Ve Koon, K.</td>
<td>182, 304, 616</td>
</tr>
<tr>
<td>Tseng, W.-Y.I.</td>
<td>172, 173, 220, 384, 435</td>
</tr>
<tr>
<td>Tsiachristos, I.</td>
<td>394</td>
</tr>
<tr>
<td>Tudor, R.</td>
<td>31, 32, 196, 489, 521, 661</td>
</tr>
<tr>
<td>Tufekcioglu, Z.</td>
<td>626</td>
</tr>
<tr>
<td>Tulupov, A.</td>
<td>557, 591, 595, 596</td>
</tr>
<tr>
<td>Tunyan, L.</td>
<td>636</td>
</tr>
<tr>
<td>Tuncyurek, O.</td>
<td>537</td>
</tr>
<tr>
<td>Turkdogan, F.</td>
<td>537</td>
</tr>
<tr>
<td>Tvdílk, T.</td>
<td>37, 41</td>
</tr>
<tr>
<td>Týrurin, I.</td>
<td>151, 528</td>
</tr>
</tbody>
</table>

**U**

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ublinskiy, M.</td>
<td>515, 719</td>
</tr>
<tr>
<td>Ucar, M.</td>
<td>68</td>
</tr>
<tr>
<td>Uecker, M.</td>
<td>180</td>
</tr>
<tr>
<td>Uematsu, A.</td>
<td>599, 602, 605</td>
</tr>
<tr>
<td>Ugander, M.</td>
<td>298</td>
</tr>
<tr>
<td>Ulinic, D.</td>
<td>380</td>
</tr>
<tr>
<td>Ullah, I.</td>
<td>573</td>
</tr>
<tr>
<td>Ulloa, P.</td>
<td>23, 181, 674</td>
</tr>
<tr>
<td>Ulmer, S.</td>
<td>402</td>
</tr>
<tr>
<td>Ulrici, J.</td>
<td>288</td>
</tr>
<tr>
<td>Ulug, A.M.</td>
<td>626</td>
</tr>
<tr>
<td>Umathum, R.</td>
<td>278</td>
</tr>
<tr>
<td>Unschild, P.G.</td>
<td>379</td>
</tr>
<tr>
<td>Urbach, H.</td>
<td>195, 696, 737</td>
</tr>
<tr>
<td>Urgošik, D.</td>
<td>227</td>
</tr>
<tr>
<td>Uribe, S.</td>
<td>191, 468</td>
</tr>
<tr>
<td>Urra, X.</td>
<td>196</td>
</tr>
<tr>
<td>Ušinskienė, B.</td>
<td>718</td>
</tr>
<tr>
<td>Usman, A.</td>
<td>18</td>
</tr>
<tr>
<td>Ussov, W.Y.</td>
<td>17, 543, 606</td>
</tr>
<tr>
<td>Ustyzhanin, D.</td>
<td>621</td>
</tr>
<tr>
<td>Uyanik-Ünal, K.</td>
<td>294</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vadapalli, A.S.</td>
<td>21, 697, 698, 701, 702, 703</td>
</tr>
<tr>
<td>Vadapalli, R.</td>
<td>21, 697, 698, 701, 702, 703</td>
</tr>
<tr>
<td>Valabrègue, R.</td>
<td>202, 456</td>
</tr>
<tr>
<td>Valavanis, A.</td>
<td>382</td>
</tr>
<tr>
<td>Valerio, A.</td>
<td>200</td>
</tr>
<tr>
<td>Vallevciene, N.R.</td>
<td>722</td>
</tr>
<tr>
<td>Valikovic, L.</td>
<td>261</td>
</tr>
<tr>
<td>Vallatos, A.</td>
<td>218, 244, 325</td>
</tr>
</tbody>
</table>
# Author Index

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yang, B.</td>
<td>87, 171</td>
</tr>
<tr>
<td>Yang, S.</td>
<td>696</td>
</tr>
<tr>
<td>Yardim, A.B.</td>
<td>283</td>
</tr>
<tr>
<td>Yerebakan, C.</td>
<td>554</td>
</tr>
<tr>
<td>Yılmaz, R.</td>
<td>548, 550</td>
</tr>
<tr>
<td>Yim, J.H.</td>
<td>251</td>
</tr>
<tr>
<td>Yoo, C.-H.</td>
<td>193, 513, 518, 523, 618</td>
</tr>
<tr>
<td>Yoshimoto, M.</td>
<td>443</td>
</tr>
<tr>
<td>Young, L.A.J.</td>
<td>261</td>
</tr>
<tr>
<td>Yu, H.</td>
<td>317, 730</td>
</tr>
<tr>
<td>Yuan, J.</td>
<td>18, 20</td>
</tr>
<tr>
<td>Yudkin, D.</td>
<td>591, 596</td>
</tr>
<tr>
<td>Yun, S.D.</td>
<td>321, 400</td>
</tr>
<tr>
<td>Zaaraoui, W.</td>
<td>446</td>
</tr>
<tr>
<td>Zabitova, M.</td>
<td>475</td>
</tr>
<tr>
<td>Zacconi, F.</td>
<td>191, 688</td>
</tr>
<tr>
<td>Zachrisson, H.</td>
<td>232</td>
</tr>
<tr>
<td>Zahra, F.T.</td>
<td>275</td>
</tr>
<tr>
<td>Zaiss, M.</td>
<td>91, 416</td>
</tr>
<tr>
<td>Zaitsev, M.</td>
<td>317, 369, 568, 570, 730</td>
</tr>
<tr>
<td>Zaitseva, N.</td>
<td>514</td>
</tr>
<tr>
<td>Zajiček, J.</td>
<td>312</td>
</tr>
<tr>
<td>Zakharova, N.</td>
<td>660</td>
</tr>
<tr>
<td>Zaldivar, D.</td>
<td>258</td>
</tr>
<tr>
<td>Zamberlan, F.</td>
<td>411</td>
</tr>
<tr>
<td>Zanlungo, S.</td>
<td>688</td>
</tr>
<tr>
<td>Zawada, E.</td>
<td>140, 564</td>
</tr>
<tr>
<td>Zawadzka-Bartczak, E.</td>
<td>259</td>
</tr>
<tr>
<td>Zelaya, F.</td>
<td>733</td>
</tr>
<tr>
<td>Zemankova, K.</td>
<td>629</td>
</tr>
<tr>
<td>Zhang, C.</td>
<td>241</td>
</tr>
<tr>
<td>Zhang, K.</td>
<td>321, 400, 481</td>
</tr>
<tr>
<td>Zhang, X.</td>
<td>490</td>
</tr>
<tr>
<td>Zhao, B.</td>
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<td>Zhao, M.</td>
<td>242</td>
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<td>Zhao, S.</td>
<td>257</td>
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<td>Ziemons, K.</td>
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<td>Zierer, C.</td>
<td>321, 338, 400, 481</td>
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<td>Zimmermann, M.</td>
<td>85, 479</td>
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<td>587</td>
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<td>Zivkovic, I.</td>
<td>54, 293</td>
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<td>Zoelch, N.</td>
<td>517</td>
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<td>Zoller, H.</td>
<td>143</td>
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<td>Zöllner, F.G.</td>
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<td>Zuckermann, A.</td>
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<td>Zwirner, K.</td>
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Sagrada Familia
MEET THE EXPERT:
Thursday, October 19, 2017   17:35
Congress Centre, Level 1

You have burning questions about MR you never dared to ask? Now is your chance!

We invited experts from all over Europe to offer their insights to anybody interested. Groups of 2-6 experts will be formed for a selection of topics ranging from basic MR physics to clinical application and they will answer all your questions personally.

For the first time, this year also one group of experts for vendor-specific questions will be formed, in which MR Enterprise members will be fielding questions.

Come and say hello at this informal event, where you’re guaranteed to broaden your network and learn something new about MR!

Magnetic Resonance Spectroscopy (MRS)
C. Arús, Cerdanyola del Vallès/ES
E. Danielsen, Copenhagen/DK
R. Grütter, Lausanne/CH
A. Heerschap, Nijmegen/CH
A. Henning, Tübingen/DE
J. Machann, Tübingen/DE

Neuroradiology
E. M. Larsson, Uppsala/SE
D. Sappey-Marinier, Bron/FR
M. Smits, Rotterdam/NL

Susceptibility weighted imaging (SWI) / Quantitative Susceptibility Mapping (QSM)
J. Acosta-Cabronero, London/UK
R. Bowtell, Nottingham/UK
C. Langkammer, Graz/AT

Ultra High Field MRI
L. Knutsson, Lund/SE
M. Ladd, Tübingen/DE
K. Miller, Oxford/UK
T. Stöcker, Bonn/DE

Vendor specific sequence and protocol questions
S. Köhler, Bruker
B. Fernandez, GE Healthcare
I. Gouadjella, GE Healthcare
Kim van de Ven, Philips Medical Systems
I. Dragonu, Siemens Healthineers
P. Speler, Siemens Healthineers
I. Vallines Garcia, Siemens Healthineers
W. de Graaf, Toshiba
CAREER SESSION:
How not to write a paper and a roundtable discussion about career options outside academia you should consider

Friday, October 20, 2017  15:40–17:10
Room 6

Stuck with writing a paper? Applying for a new job? This is the session for you!

Prof. Patrick Cozzone, long-time editor in chief of ESMRMB’s society journal MAGMA and Dr. Andreas Trabesinger, researcher and communications expert, will start you off with some advice on “How not to write a paper”.

Then, a panel of experts will take the stage to talk about “Career options outside academia” and answer audience questions.

Take this chance to ask anything you have always wanted to know about job chances in the industry, the application process, scientific writing and more!

Panelists
P.J. Cozzone, Marseille/FR & Singapore/SGP
A. Trabesinger, Zurich/CH
A. Filippone, Bracco
J. Voiron, Bruker
M. Goyen, GE Healthcare
X. Golay, Gold Standard Phantoms
P. Murphy, GSK
P. Luijten, Philips Medical Systems
I. Vallines, Siemens Healthineers
W. de Graaf, Toshiba
School of MRI 2018

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Advanced Breast & Female Pelvis MR Imaging
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Body Diffusion-Weighted MRI: Solving Clinical Problems and Diagnostic Dilemmas
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eLearning: Advanced course in Applied MR Techniques

www.esmrmb.org
Lectures on MR 2018

Educational courses, exercises, and practical demonstrations on MR physics and engineering

Simultaneous multi-slice/multiband imaging
April 9–11, Maastricht/NL

RF-Coils:
Design and build your own coil
September 17–20, L’Aquila/IT

Diffusion: From acquisition to tissue microstructure
September 3–5, Lisbon/PT

Resting state fMRI
TBD

MR image processing - from image data to information
September 5–7, Berlin/DE

www.esmrmb.org
Important Addresses

Congress Venue
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Montjuïc Venue
Palau de Congressos (Congress Centre)
Avda. Reina Maria Cristina s/n
08004 Barcelona, Spain
www.firabarcelona.com

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ESMRMB Office
Neutorgasse 9
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Phone: (+43) 1 535 13 06
Fax: (+43) 1 533 40 64 448
E-Mail: office@esmrmb.org
Web: www.esmrmb.org

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€ 50

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ESMRMB Office: Neutorgasse 9, AT-1010 Vienna
www.esmrmb.org

More information at www.esmrmb.org
Floorplans

booth # Exhibitor
sorted by booth number

1  ESMRMB
2  ISMRM
3  GE Healthcare
4  BIOPAC Systems Inc.
5  Philips Medical Systems NL B.V.
6  Bracco
7  TOSHIBA Medical Systems Europe
8  Bruker
9  RAPID Biomedical GmbH
10 Neos Biotec
11 Siemens Healthcare GmbH
12 Mediso Ltd.
13 Gold Standard Phantoms Limited
14 MRI-Tec / MR:comp GmbH
15 Cambridge Research Systems Ltd

LEVEL 3
MR ENTERPRISE MEMBERS
Bracco
Bruker
GE Healthcare
Philips Medical Systems
Siemens Healthineers
Toshiba

SPONSOR ACKNOWLEDGEMENT
The ESMRMB Local Organising Committee would like to thank the following companies for their support:
Thursday, October 19
12:50–13:50
Siemens
Constantly exceeding the possible – pioneering MRI

Constantly exceeding the possible – pioneering MRI
Robert Krieg
Siemens Healthineers

Ready for precision medicine – close to one year with MAGNETOM Vida
Sergios Gatidis
University Hospital Tübingen, Germany

Keep breathing – GRASP in the abdomen and pelvis
Tobias Heye
University Hospital Basel, Switzerland

Friday, October 20
12:30–13:30
GE
Innovations in Neuro MR Imaging

GE commitment to MR research in Europe
Perry Frederick, Director - Strategic Research Europe, GE Healthcare

Fast and motion robust clinical brain MRI
Stefan Skare, PhD
Department of Clinical Neuroscience
Karolinska Institutet, Stockholm/SE

MRI Multicompartimental diffusion: Methods, implementation and clinical scope
Denis Ducreux,
Head of Diagnostic Neuroradiology Department
CHU Bicêtre, Université Paris Sud/FR
Friday, October 20
12:30–13:30

Philips Room 5

**Philips MR vision**
Kim van de Ven, PhD
Philips MR
Best, NL

**Arterial Spin Labeling:**
**Current practice and future perspectives**
Matthias van Osch, PhD
LUMC
Leiden, NL

**The ALFA project: the role of advanced MRI to identify early pathophysiological features of Alzheimer's disease**
Juan Domingo Gispert, PhD
Fondacion Pascal Maragall
Barcelona, ES
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<th>Exhibitor</th>
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<td>15 Cambridge Research Systems Ltd</td>
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BIOPAC lets you measure physiology anywhere with innovative, compatible solutions that can be used by anyone for meaningful discovery. Physiological data acquisition amplifiers, transducers, software — NEW MP160 System, NEW smart BioNomadix BioShirt, the wireless, wearable BioNomadix Logger, B-Alert X10 EEG, Mobita Wireless EEG, fNIR optical brain imaging.

Bracco Imaging S.p.A., part of the Bracco Group, is one of the world’s leading companies in the diagnostic imaging business. Headquartered in Milan, Italy, Bracco Imaging develops, manufactures and markets diagnostic imaging agents and solutions that meet medical needs. Bracco Imaging offers a product and solution portfolio for all key diagnostic imaging modalities: X-ray Imaging (including Computed Tomography-CT, Interventional Radiology, and Cardiac Catheterization), Magnetic Resonance Imaging (MRI), Contrast Enhanced Ultrasound (CEUS) and Nuclear Medicine through radioactive tracers. The diagnostic imaging portfolio is completed by several medical devices and advanced administration systems for contrast imaging products in the fields of radiology.

The Company operates in over 100 markets worldwide, either directly or indirectly, through subsidiaries, joint ventures, licenses and distribution partnership agreements.

To learn more about Bracco Imaging, visit www.braccoimaging.com
Bruker

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GERMANY

info@bruker.com
www.bruker.com

booth #8

Bruker is the worldwide technology and market leader in Preclinical Imaging with a dedicated preclinical imaging (PCI) division that offers an unmatched portfolio of 9 imaging capabilities. Bruker's MRI product portfolio has long been acknowledged as the pinnacle of innovation, and today this encompasses: ICON™ - an easy-to-use 1 Tesla desktop MRI scanner for small rodents that combines simplicity with compact dimensions. BioSpec 3T – Newly introduced system featuring a superior cryogen-free design at translational field strength of 3 Tesla uniting the latest Bruker MRI technology, software application packages and multimodal options in a compact, easy to site footprint. To augment the range of research options the BioSpec 3T is fully compatible with other imaging modalities such as PET. BioSpec® - a multipurpose system for biomedical research designed for maximum flexibility in implementing the latest developments in imaging and spectroscopy. PharmaScan® - a system designed for routine, dedicated applications in molecular imaging and pharmaceutical research. ParaVision® 6 – Bruker's software delivers a new dimension in optimized workflow, application-oriented experimental protocols, an intuitive, interactive 3D scan planning viewport, and automatic reporting. Bruker designs, manufactures and distributes life science and analytical research tools based on magnetic resonance core technology, including NMR, EPR, MRI as well as superconducting magnets.

Cambridge Research Systems Ltd

80 Riverside, Sir Thomas Longley Road
Rochester, Kent, ME2 4BH, UK

Phone: +44 1634 720707
enquiries@crsltd.com
www.crsltd.com

booth #15

Cambridge Research Systems offers MRI in-room audio-visual equipment, plus eye tracking, response devices, patient entertainment and comfort accessories. You can be confident that our tools provide the precision and control you require, while remaining practical and affordable - the engineering philosophy which we have held since our incorporation in 1989.
The European Society for Magnetic Resonance in Medicine and Biology (ESMRMB) is a non-profit Society, founded in 1984 as a platform for clinicians, physicists and basic scientists with an interest in the field of MR and currently counts around 1,100 active members. Apart from its annual meeting, the ESMRMB organises the School of MRI educational courses on applied MR techniques and clinical MR imaging, and the Lectures on Magnetic Resonance courses, designed to provide the physical fundamentals of MR imaging and spectroscopy, as well as aspects of applications of these techniques in clinical and biochemical research and development. In 2009 the Hands-On MRI course programme, aimed at MR radiographers, technologists and interested physicians, was successfully introduced. Each Hands-On MRI course is held on equipment of different vendors with 50% lectures and 50% hands-on training at the MRI console and/or post-processing software. MAGMA, the official society journal (also included in the membership), is published since 1994 and has become well-established, with a remarkably high impact factor.

GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE: GE) works on things that matter - great people and technologies taking on tough challenges. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

For more information about GE Healthcare, visit our website at www.gehealthcare.com.
Gold Standard Phantoms Limited

Unit 103 Belgravia Workshops
159-163 Marlborough Road
N19 4NF London
UNITED KINGDOM

Phone: +44 2027 6847 749
info@goldstandardphantoms.com
www.goldstandardphantoms.com
booth #13

At Gold Standard Phantoms, our mission is to provide a one-stop-shop solution enabling radiology to become a true quantitative technique. We are working in collaboration with the main stakeholders in the field to provide an integrated solution to the problem of maintenance of quality and standards in Quantitative Medical Imaging. Quantitative Medical Imaging has remained elusive, despite an incredible effort over the last 30 years by many players. Yet, so far, it has not been fully accepted, and intrinsically quantitative methods such as Arterial Spin Labelling are still not used in daily clinical practice due to the lack of internationally accepted standards, governance structure and knowledge. As such, our first product will provide the final enabling step to make quantitative ASL a clinical reality. In 2016, we developed our product to the point of being commercialisable. A wide-ranging beta-test study will be taking place soon in order to demonstrate the reproducibility of the product when used in several research groups around the world. Our vision is to be the premier provider of calibration services for clinical quantitative medical imaging worldwide.

Visit us at booth 13 to discover more about what the team at Gold Standard Phantoms are doing to achieve this.

International Society for Magnetic Resonance in Medicine

2300 Clayton Road, Suite 620
CA 94520 Concord
UNITED STATES

Phone: +1 5108 4118 99
Fax: +1 5108 4123 40
info@ismrm.org
www.ismrm.org
booth #2

The International Society for Magnetic Resonance in Medicine (ISMRM) is the foremost international, interdisciplinary community promoting discovery, innovation and clinical translation, as well as providing education, in the field of magnetic resonance. ISMRM membership is comprised of over 9,000 professionals from over 60 countries, including clinicians, physicists, engineers, biochemists and technologists from academia, private practice, regulatory and governmental agencies and industry. ISMRM organizes the largest annual meeting dedicated to magnetic resonance, other major educational and scientific workshops, as well as publishes two journals – MRM for basic science and JMRI for clinical science.
Mediso Ltd.
Alsótörökvész út 14.
1022 Budapest
HUNGARY
Phone: +36 1399 3046
info@mediso.com
www.mediso.com
booth #12

Mediso have been working in the field of nuclear and molecular medicine since 1990 with a profile of development, manufacturing, sales and servicing of multi-modality in-vivo imaging systems. The company offers complete solutions from hardware design to evaluation and quantification software, both for clinical patient care and high-level life science research into all animal models in between rodents and primates. Besides the unique triple-modality clinical SPECT-CT-PET hybrid AnyScan® system, Mediso launched the world’s first pre-clinical integrated PET-MRI and SPECT-MRI cameras as members of the nanoScan® high-end small animal imager family, consisting of SPECT, PET, CT and MRI modalities. Mediso runs successfully two complex clinical diagnostic, research and educational centres and offers clinical and evaluation software trainings for the international medical community.

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Neos Biotec is the MRI coil supplier for your research. Located in Pamplona, Spain, and having started its activity in 2011, Neos Biotec’s main objective is to help research teams get the most out of their MR experiments by providing our coil design expertise. Neos Biotec does not only build excellent performance RF coils, but also provides advice and support throughout the entire research process: from experiment design and coil set-up specification to hardware commissioning and imaging tests. We like to be seen by our customers as an extension of their multidisciplinary research team, sharing the same objectives, and providing added value in the field where we are experts: coils and RF electronics design.

In addition to our portfolio of standard off-the-shelf coils, Neos Biotec’s strongest point is the development of unique RF coilsets for challenging imaging needs. We kindly invite you to visit our booth to show you the details of our latest coil developments: Multiple configuration receive arrays, Compact coil systems, MRI-PET coils, Micro-imaging probes, Modular surface loops. We will also be very happy to discuss about your existing or future coil needs.

Royal Philips of the Netherlands is a leading health technology company focused on improving people’s health and enabling better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and home care. Philips leverages advanced technology and deep clinical and consumer insights to deliver integrated solutions. The company is a leader in diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care. At Philips, we strive to make the world healthier and more sustainable through innovation. Our goal is to improve the lives of 3 billion people a year by 2025. We will be the best place to work for people who share our passion. Together we will deliver superior value for our customers and shareholders.

New about Philips can be found at http://www.philips.com/a-w/about/news.html
RAPID Biomedical is proud of being the first company to have brought customized RF coils into the market that are individually designed to the need of the scientific MR community. Through the high level RF expertise and attentive alliances with the MR system manufacturers today we offer full compatibility for all of our coil solutions whether standard or customized. In almost 20 years of company history RAPID Biomedical has delivered over 1200 different coil designs into more than 30 countries all over the world. We have thorough experience in designing and manufacturing coils from low field (from 0.2 T) to UHF human and animal scanners up to 21 T NMR systems. The range of non-proton solutions delivered by RAPID Biomedical includes 11 different nuclei (and counting). All coils are manufactured in Rimpar, Germany. The current R&D work concentrates on PET/MR compatible coils, coil packages for hyperpolarized nuclei, human 7T coils, dual tuned coils and multi array coils for parallel MRI both for human as well as for animal studies. Our sister company RAPID MR International, LLC (www.rapidmri.com), situated in Columbus, Ohio, is contact partner for customers from the United States, Canada and South America. We cordially invite you to visit our booth on the exhibition floor. Take your chance in our traditional quiz and see RAPID coil solutions and scientific results first hand.

Siemens Healthineers, Magnetic Resonance: At Siemens Healthineers, we are passionate about enabling healthcare providers worldwide to deliver high-quality patient care, and to do so affordably. As a leading global healthcare company, we at Siemens Healthineers continuously develop our portfolio further, from medical imaging and laboratory diagnostics, to adding managed services, consulting, and healthcare IT services – as well as further technologies for therapeutic and molecular diagnostics. Managing rapid procedure growth and minimizing costs, while at the same time achieving clinical excellence are some of the central challenges affecting healthcare around the globe. Magnetic Resonance, a Business Line at Siemens Healthineers, turns these challenges into opportunities. Four unique technologies, Tim, Dot, Trendsetting Applications, and Life Design, offer our customers exceptional image quality, efficiency & speed, and patient friendliness, while at the same time providing investment protection. Equipped with these technologies and a very strong global collaboration network, we enable our customers to lead MRI. www.siemens.com/mri
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booth #7

Toshiba Medical offers a full range of diagnostic medical imaging solutions including CT, X-Ray, Ultrasound and MRI, across the globe. As of December 2016, Toshiba Medical became a member of the Canon Group. In line with our continued Made For life philosophy, patients are at the heart of everything we do. Our mission is to provide medical professionals with solutions that support their efforts in contributing to the health and wellbeing of patients worldwide. Our goal is to deliver optimum health opportunities for patients through uncompromised performance, comfort and safety features.

At Toshiba Medical we work hand in hand with our partners – our medical, academic and research community. We build relationships based on transparency, trust and respect. Together as one, we strive to create industry-leading solutions that deliver an enriched quality of life.
¡Bienvenidos! ¡Benvinguts!

Join us at the ESMRMB 2017 Welcome Reception!

Thursday, October 19, 18:00
Congress Centre, Level 1
Please present your badge at the main entrance!

The ESMRMB Local Organising Committee would like to thank the following companies for their support:
magma
Magnetic Resonance Materials In Physics, Biology And Medicine

NEW MAGMA Special issue
(to be published as first issue of 2018)
“Cardiovascular Magnetic Resonance”
with Tim Leiner and Gustav Strijkers
as Guest-Editors

Recent MAGMA Special issues
(published in 2016)
“Tissue segmentation in MRI”
with Fritz Schick as Guest-Editor

“Ultraschig Field MR:
Cutting Edge Technologies Meet Clinical Practice”
with Thoralf Niendorf, Markus Barth,
Frank Kober, Siegfried Trattnig
as Guest-Editors

Editor in Chief:
Patrick J. Cozzone

Online manuscript submission
and peer-review process via
http://mc.manuscriptcentral.com/magma
Average reviewing cycle (first answer to authors): 5 weeks
Time to publication on-line after acceptance: 3 weeks

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SMRT ABSTRACT DEADLINE: 15 NOVEMBER 2017