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PROGRAM BOOK

ISMIRM  **Benelux**

ANNUAL MEETING 2025

17th Annual Meeting
17th of January, 2025 Gooiland, Hilversum

Photo by Ryoma Sakamoto



ANNUAL MEETING 2025

WELCOME

Dear participants and guests,

I would like to extend to you a warm welcome to the ISMRM Benelux Chapter Meeting 2025! We are thrilled to have you join us in Hilversum for a day filled with exciting new developments, knowledge exchange and networking opportunities.

This year's meeting brings together an exceptional community of MR scientists, researchers, clinicians, and industry leaders from all across the Benelux. We encourage you to take full advantage of the scientific sessions, interactive workshops, and networking opportunities that have been carefully designed to foster learning and innovation.

The future of MRI holds immense promise, with advancements such as enhanced resolution, faster imaging techniques, portable low-field scanners, and novel contrast mechanisms paving the way for even greater insights into animal and human health and disease. These developments will continue to transform both research and clinical applications, driving the field forward.

We look forward to a memorable day of inspiration, discovery, and connecting with like-minded professionals in MRI!

Best regards,

Fieke Prinse

On behalf of the ISMRM Benelux Meeting Committee 2025

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FLOOR PLAN

Ground floor



Sponsor Booths

1. Philips
2. Siemens Healthineers
3. GE HealthCare
4. MR Solutions
5. NVision
6. KALCIO Healthcare

PROGRAM

8.30	Registration + Coffee	Registration area + Green Center
9.15	Opening plenary session Keynote by Martijn Froeling	Theater
10.30	Poster session I + coffee break sponsored by Canon CANON MEDICAL	Showroom + Green Lounge
11.25	Parallel session I Neuroimaging MRI acquisition Oncology	Theater Cineac On Air
12.25	Lunch General assembly meeting (ALV)	Green Lounge + Green Center On Air
13.20	Workshops Hyperpolarized ¹³ C MRI by NVision AI applications in MRI by GE HealthCare Thesis Production: Get started the right way! by Proefschriftmaken	Theater Cineac On Air
13.55	Parallel session II Neuroimaging Image reconstruction and postprocessing Body MRI	Theater Cineac On Air
14.55	Poster session II + coffee break	Showroom + Green Lounge
15.50	Parallel session III Cardiovascular MRI Hardware development Simulation and modeling	Theater Cineac On Air
16.40	Closing ceremony, awards	Theater
17.00	Networking Drinks	Green Lounge + Green Center
18.00– 20.00	Dinner	Green Lounge + Green Center

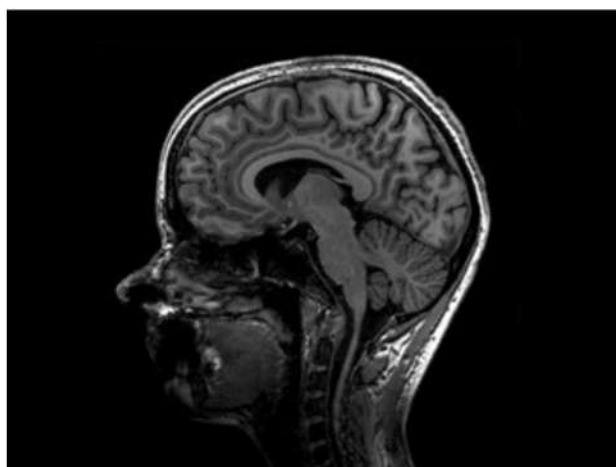
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MAGNETOM Terra.X* introduces the next generation 7T MRI that will enable you to make the difference. With its groundbreaking Ultra IQ Technology, it will deliver unprecedented image clarity that allows you to confidently assess subtle pathological details. In combination with our AI-powered Deep Resolve, MAGNETOM Terra.X ultimately will take clinical routine to a new level. MAGNETOM Terra.X makes the difference for clinicians and scientists.



StudyID: 4aaaa0264 / 8Tx32Rx head coil

PLENARY SESSION

Power Pitches

10:10 – Theater

PP-001 Maaïke Konig

Dynamic imaging of deuterated glucose in the stomach, portal vein, and liver using 3D deuterium MRSI at 7T

Imaging and Oncology, University Medical Center Utrecht, Utrecht, The Netherlands

PP-002 Britt van den Heuvel

Linking brain and eye fluid dynamics: Multi-b-value diffusion derived interstitial fluid volume relates to tear fluid AQP5 levels

Department of Radiology & Nuclear Medicine, Maastricht University Medical Center+, Maastricht, The Netherlands

PP-003 Zarah van der Pal

Long-term stimulant treatment and development of brain and behaviour: a naturalistic long-term follow-up of boys and men with ADHD

Department of Radiology & Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

PP-004 Gerrit Arends

Bilateral breast gradient insert prototype for strong diffusion encoding at 3T

Department of Radiology and Oncology, Centre for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

PP-005 Stephanie Gonzalez Riedel

Design and Evaluation of an Educational MRI Simulator: eduMRIsim

Biomedical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

PP-006 Madda Debiasi

Highly-accelerated CSF-STREAM: two-fold faster CSF-mobility and FA measurement in PVS, via locally low rank reconstruction

C.J. Gorter MRI Center, Department of Radiology, Leiden University Medical Center, Leiden, The Netherlands

PARALLEL SESSION I
Neuroimaging
11:25 – Theater

Moderators

Chloé Najac
Leiden UMC

Merel van der Thiel
Maastricht UMC+

O-001 Bas Schilder

Detecting dopaminergic degeneration in clinically uncertain parkinsonian syndrome patients using fast MR-STAT relaxometry

Computational Imaging Group for MRI Therapy & Diagnostics, Department of Radiotherapy, University Medical Center Utrecht, Utrecht, The Netherlands

O-002 Mathijs Dijsselhof

Cardiovascular risk factors are associated with brain ageing

Radiology and Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-003 Navid Jabarimani

Characterizing differences between white and gray matter T1W-based segmentations at 0.6T and 1.5T

C.J. Gorter MRI Center, Radiology, Leiden University Medical Center, Leiden, The Netherlands

O-004 Joëlle van Rijswijk

Longitudinal assessment of changes in the BBB water permeability in a mouse model of Huntington's Disease using multi-TE ASL MRI

Bio-Imaging Lab, University of Antwerp, Antwerp, Belgium

O-005 Emiel Roefs

Bi-directional BOLD-CSF coupling using sagittal BOLD imaging with additional saturation slab for lymphatic function assessment

C.J. Gorter MRI Center, Radiology, Leiden University Medical Center, Leiden, The Netherlands

PARALLEL SESSION I

MRI Acquisition

11:25 – Cineac

Moderators

Miha Fuderer
UMC Utrecht

Kyungmin Nam
UMC Utrecht

O-011 Vladislov Koloskov

Improving Fetal MRI: The Impact of a Flexible Metasurface-based Pad

Magnetic Detection & Imaging Group, TechMed Centre, University of Twente, Enschede, The Netherlands

School of Physics and Engineering, ITMO University, Saint Petersburg, Russia

O-012 Ayda Arami

Toward Microbubble Imaging in MRI: Detection of Microscopic Spherical Structures with Size-Selective T2 Contrast

Imaging Physics, Delft University of Technology, Delft, The Netherlands

O-013 Helena Durrant

Multi-Echo versus T2-Prepared pCASL: what to use for measuring water transport across the Blood Brain Barrier

C.J. Gorter MRI Center, Radiology, Leiden University Medical Center, Leiden, The Netherlands

O-014 Reagan Tompkins

Third Trimester Fetal 4D Flow MRI with Motion Correction

Department of Radiology & Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-015 Luka Stam

Interleaved 2H and 31P MRSI acquisitions of the liver at 7T employing a double tuned transmit bore coil and receive body array

Center for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

PARALLEL SESSION I

Oncology

11:25 – On Air

Moderators

Esther Warnert
Erasmus MC

Osman Akdag
Netherlands Cancer Institute

O-016 Patrick Tang

Can arterial spin labeling MRI improve radiotherapy target delineation of glioblastoma?

Brain Tumor Center, Erasmus MC Cancer Institute, University Medical Center Rotterdam, Rotterdam, The Netherlands

O-017 Alvja Mali

Ultrastructure-Driven pH Sensitivity in Perfluorocarbon-PLGA Nanoparticles for ^{19}F MRI

Department of Cell Biology and Immunology, Wageningen University and Research, Wageningen, The Netherlands

O-018 Li Shen Ho

Differences in metabolic behavior of liver metastases of colorectal carcinoma: $[^{18}\text{F}]\text{FDG}$ -PET vs. DMI at 7T

Imaging and Oncology, University Medical Center Utrecht, Utrecht, The Netherlands

O-019 Karen van der Werff

Towards the use of a single bolus in MR Vascular Fingerprinting with DSC-HEPI MRI: an in-vivo exploration

Department of Radiology and Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, The Netherlands

O-020 Romy Buijs

Metabolic modeling using Deuterium Metabolic Imaging data in healthy, epileptogenic and glioblastoma brain tissue

Center for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

NVISION

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WORKSHOPS



NVision is a developer of fast, reliable, and user-friendly ^{13}C MRI hyperpolarizers and corresponding hyperpolarized imaging agents. Our PHIP-based technology enables the precise assessment of in vivo metabolism using standard MRI, supporting preclinical and clinical applications such as cancer diagnostics and therapy response monitoring. Deployment of preclinical polarizers began in October 2024. This workshop, *Hyperpolarized ^{13}C MRI: A Practical Overview and Latest Advances*, will provide attendees with a clear understanding of what is needed to integrate hyperpolarization into MR research, emphasizing the simplicity of the process. Topics include the required hardware, pulse sequences, data processing strategies, and the unique value of metabolic imaging for unraveling real-time biochemical processes. We will also introduce POLARIS, our cutting-edge preclinical polarizer, and discuss the latest advancements in hyperpolarized ^{13}C MRI.



GE HealthCare

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator. Join our workshop to learn about *AI applications in MRI*, about the great potential of public-private partnerships to solve today's challenges in healthcare and about our perspective on career planning in industry.



PROEFSCHRIFT
MAKEN

Thesis Production: Get started the right way! We will go into detail about the production of your thesis, layout possibilities, and your sustainable digital thesis. After our workshop, you will know everything you need to get started with the production of your thesis!

PARALLEL SESSION II

Neuroimaging

13:55 – Theater

Moderators

Leon Munting
Leiden UMC

Monica van den Berg
University of Antwerp

O-006 Damon Verstappen

DCE-MRI reveals elevated blood-brain barrier leakage of heterogeneous white matter in cerebral small vessel disease

Department of Radiology & Nuclear Medicine, Maastricht University Medical Center+, Maastricht, The Netherlands

O-007 Diogo Fernandes

Effects of acetazolamide and caffeine on blood-brain-barrier water permeability measured by non-invasive ASL-based MRI sequences

Radiology and Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-008 Ellen van Hulst

Detection of Cardiac-Induced Volumetric Brain Tissue Pulsations and Compressions in a Post-Trauma Craniectomy Patient: An MRI Case Report

Translational Neuroimaging group, Center for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

O-009 Guus Vorst

Brain shrinkage may lead to skull thickening: a study in leukodystrophies and multiple sclerosis

Dept of Child Neurology, Amsterdam Leukodystrophy Centre, Emma Children's Hospital, and Amsterdam Neuroscience, Amsterdam UMC, Vrije Universiteit, Amsterdam, The Netherlands

O-010 Judith van Rooij

Short-term caloric restriction or resveratrol supplementation alters large-scale brain network connectivity in male and female rats

Bio-Imaging lab, University of Antwerp, Antwerp, Belgium

PARALLEL SESSION II

Image Reconstruction and Postprocessing

13:55 – Cineac

Moderators

Daniel Uher
Maastricht UMC+

Yiming Dong
Leiden UMC

O-026 Fei Xu

More accurate synthetic MRI to shorten clinical protocols

Computational Imaging Group for MR diagnostics & therapy, Center for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

O-027 Marius Burman Ingeberg

Evaluating the performance of poroelastic and poroviscoelastic models in intrinsic MR elastography

Translational Neuroimaging Group, Center for Image Sciences, University Medical Center Utrecht Utrecht, The Netherlands

O-028 Eva Aalbrecht

Automated post-processing of longitudinal 4D flow MRI in patients with an abdominal aortic aneurysm

Department of Radiology and Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-029 Natalia Korobova

Uncertainty in Deep Learning of DCE-MRI Parameter Estimation

Radiology and Nuclear Medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-030 Chinmay Rao

Accelerated FLAIR Imaging at 0.6T using T2W-guided Multi-contrast Deep Learning-based Reconstruction using a Zero-shot Approach

Department of Radiology, Leiden University Medical Center, Leiden, The Netherlands



Cerebriu

Every patient diagnosed in time

Apollo is an AI-based software suite designed to enable on-table detection of critical findings such as infarcts, intracranial tumors and hemorrhages.

It provides real-time alerts on critical conditions for priority reading and real-time adaptation of MR scanning protocols, helping radiology departments achieve excellence - from image acquisition to diagnosis.

Apollo Software Suite:



SMART Priority

Apollo monitors scans in real-time, flagging critical findings as they emerge.



SMART Protocol

Apollo's proactive approach to detect critical conditions allows to guide protocol adaptation real-time.



SMART Reading

Apollo prioritizes brain MRI scans in a consolidated worklist, based on the severity and urgency of detected findings.

Apollo enables:



Improve
operational
efficiency



Faster turnaround
time for acute
findings



Reduce patient
recalls



Improved patient
journeys

PARALLEL SESSION II

Body MRI

13:55 – On Air

Moderators

Pandichelvam Veeraiah
Radboud UMC

Pim Pullens
Ghent University

O-024 Luuk Vos

Time-resolved 3D-PC MRI measurements of the upper leg muscles during dynamic knee flexion: the effect of the fatigue threshold

Biomedical Engineering and Physics, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-023 Max van Riel

4D Time-Resolved Strain Tensor Analysis Using Spectro-Dynamic MRI Reveals Muscle Activation Patterns

Computational Imaging Group for MR diagnostics & therapy, Center for Image Sciences, University Medical Center Utrecht, Utrecht, The Netherlands

O-022 David Heesterbeek

Quantitative in-vivo analysis of biomechanical properties reveals tissue stiffness changes during contraction of the thigh muscles

Computational Imaging Group for MR diagnostics & therapy, University Medical Center Utrecht, Utrecht, The Netherlands

O-021 Bente Ariëns

Impact of hyperglycemia on kidney perfusion of matched T2D and NC adults using multiparametric MRI

Radiology and nuclear medicine, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-025 Irina De Alba Alvarez

Female levator ani muscle defect assessment in supine and upright position

Multi Modality Medical Imaging (M3I), TechMed Centre, University of Twente, Enschede, The Netherlands

PARALLEL SESSION III
Cardiovascular MRI
15:50 – Theater

Moderators

Bram Coolen
Amsterdam UMC

Maarten Terpstra
UMC Utrecht

O-035 Thomas Olausson

Free-Running Time-Resolved 3D+time CMR at 40 Hz in a One Minute Scan using Cartesian Sampling and CMR-MOTUS

Computational Imaging Group for MR Therapy and Diagnostics, Center for Image Science, University Medical Center Utrecht, Utrecht, The Netherlands

O-036 Juul Bierens

The association between MRI-based Carotid Plaque-RADS and ipsilateral cerebral ischemia recurrence

Department of Radiology & Nuclear Medicine, Maastricht University Medical Center+, Maastricht, The Netherlands

O-037 Geoffrey Wendell de Mooij

Oxygenation-Sensitive Cardiac Magnetic Resonance: Non-Invasive and Needle-Free Alternative for Assessment of Myocardial Oxygenation-Initial Clinical Experience-

Department of Cardiology, Amsterdam University Medical Center, Amsterdam, The Netherlands

O-038 Matic Pusovnik

Tracking Endothelial Activation Over Time in Myocardial Ischemia-Reperfusion Injury Using In Vivo MRI and Targeted Iron Oxide Particles

Biomedical MRI, Department of Imaging and Pathology, KU Leuven, Leuven, Belgium

PARALLEL SESSION III
Hardware Development
15:50 – Cineac

Moderators

Irena Zivkovic
TU Eindhoven

Edwin Versteeg
UMC Utrecht

O-039 Erik van Riel

A Low Inductance Nonlinear Gradient Array Design to Mitigate PNS and Reduce Voltage for Extension to Ultrasonic Whole-Body Fast and Silent MRI

Department of Radiology, University Medical Center Utrecht, Utrecht, The Netherlands

O-040 Jules Vliem

Toroid-inspired RF Volume Coils for Enhanced Transmit Efficiency at Ultra-Low Field 47mT MRI: A Comparison with Solenoid Coils

Department of Electrical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

O-041 Kaiqi Meng

An Integrated Unipolar Ultrasonic Gradient for Mitigating PNS and Aliasing in Accelerated Silent MRI

Department of Radiology, University Medical Center Utrecht, Utrecht, The Netherlands

O-042 Lyanne Bude

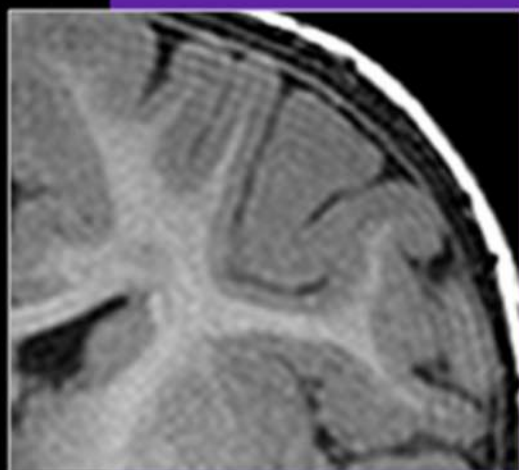
Self-decoupled toroid coils for densely packed receive arrays at 3T MRI

Department of Electrical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

AIR™ Recon DL 3D

8-month-old pediatric brain

Conventional



3D BRAVO

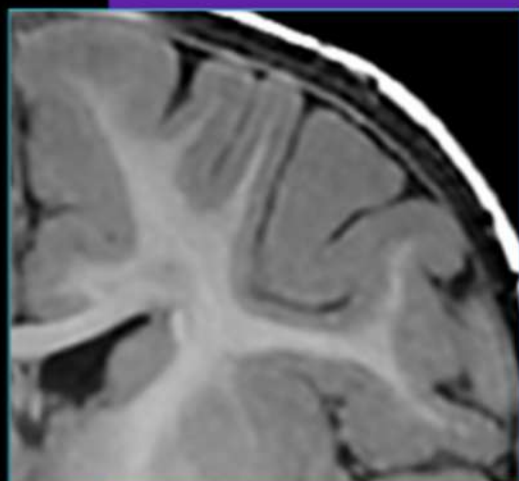
Matrix = 264 x 264

FOV = 22 x 22 cm²

Slice = 0.8 mm / 264 slices

Scan time = 7:15 min

AIR™ Recon DL



GE HealthCare

PARALLEL SESSION III

Simulation and Modeling

15:50 – On Air

Moderators

Patrick Fuchs
University of Antwerp

Ayda Arami
TU Delft

O-031 Koen Custers

Optimization and application of MP2RAGE sequence for T1-based thermometry in the fat layer of the human calve

Biomedical Engineering, Medical Imaging Analysis, Eindhoven University of Technology, Eindhoven, The Netherlands

O-032 Jiying Dai

Demonstration of substantial overestimation of signal when combining low-SNR signals with self-weighted methods

University Medical Center Utrecht, Utrecht, The Netherlands

O-033 Dennis van de Sande

A Digital Phantom for 3D MR Spectroscopy Data Simulation

Department of Biomedical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

O-034 Niels Bijl

Simulation Aided Design of an Integrated MR Receive Array for MR-Guided Radiofrequency Hyperthermia Treatment of the Breast

Department of Electrical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

Poster Index

PP and ODD posters in poster session I: 10:30–11:20
EVEN posters in poster session II: 14:55–15:45

Power Pitch abstracts

- PP-001** Dynamic imaging of deuterated glucose in the stomach, portal vein, and liver using 3D deuterium MRSI at 7T
- PP-002** Linking brain and eye fluid dynamics: Multi-b-value diffusion derived interstitial fluid volume relates to tear fluid AQP5 levels
- PP-003** Long-term stimulant treatment and development of brain and behaviour: a naturalistic long-term follow-up of boys and men with ADHD
- PP-004** Bilateral breast gradient insert prototype for strong diffusion encoding at 3T
- PP-005** Design and Evaluation of an Educational MRI Simulator: eduMRIsim
- PP-006** Highly-accelerated CSF-STREAM: two-fold faster CSF-mobility and FA measurement in PVS, via locally low rank reconstruction

Cardiovascular Imaging

- P-007** A protocol for free breathing 3D-CINE MRI with black blood contrast and fat suppression
- P-008** Five-dimensional cardiac MRI in one minute using the CMR-MOTUS framework on a 1.5 T MR-Linac
- P-009** The role of contrast timing on myocardial extracellular volume fraction measurements using cardiac MRI: insight from a large animal infarct model

Neuroimaging

- P-010** The importance of accounting for hormonal fluctuations in neurofluid imaging: BOLD-CSF coupling relates to estradiol levels
- P-011** Cerebral vascular pulsatility is altered by hypercapnia stimuli: a BOLD fMRI study
- P-012** Studying the fingerprints of Parkinson's disease development in R2* and QSM brain maps
- P-013** Assessing myelin changes in lesional and non-lesional white matter in patients with MS using the T1w/FLAIR-ratio: a longitudinal study
- P-014** Dirty-appearing white matter at 3 and 7 Tesla MRI in older memory clinic patients

Poster Index

ODD numbers in poster session I, EVEN numbers in poster session II

Neuroimaging

- P-015** Arachnoid Granulation Characterization in Dutch-type hereditary Cerebral Amyloid Angiopathy
- P-016** Effects of short-term methylphenidate treatment on brain network connectivity in attention-deficit hyperactivity disorder
- P-017** Investigating neuroinflammation and iron accumulation in frontotemporal lobar degeneration using 7T MRI
- P-018** Taking cerebellar segmentations to the next level: 100 μ m resolution at 9.4T
- P-019** Optimization of T1-w/T2-w ratio for myelin using different TE and exponents
- P-020** Feasibility of in vivo metabolic profiling in the human brainstem periaqueductal gray matter by 1H-MRS at 7T
- P-021** Neural activation upon visual stimulation and functional connectivity during rest assessed with Zero-echo time fMRI in rats
- P-022** Deuterium MR Spectroscopy (DMS) identifies altered Glucose Metabolism in the Brain of an Alzheimer Mouse Model at 6 months of age
- P-023** Retrospective relaxometry from conventional contrasts by physics-informed deep learning: A pilot on Tumor, MS, Stroke and Epilepsy patients
- P-024** Towards reproducible perivascular space quantification: an open-source perivascular space segmentation benchmark
- P-025** Perivascular CSF T2 Values compared to Sulcal and Lateral Ventricular CSF: a window into brain clearance pathways

Body

- P-026** Repeatability of 13C-MRS for absolute glycogen quantification in the human liver and skeletal muscle at 7T
- P-027** 1H23Na-TiCEPT - Wideband 1H and 23Na tissue composition based electrical property tomography
- P-028** Phantom simulation of spectral ghosting caused by respiratory stomach motion in 3D MRSI
- P-029** Assessing the image quality and diagnostic ability of DL-RESOLVE DWI in 3T breast MRI: Preliminary Results
-

Poster Index

ODD numbers in poster session I, EVEN numbers in poster session II

Image Reconstruction and Postprocessing

- P-030** Time-resolved motion estimation from under-sampled MRI data as a spectral optimal control problem
- P-031** Comparison of K-Space and Spatial Based Post Processing Methods for 31P MRSI Grid Realignment
- P-032** Advancing Multishot EPI Reconstruction for Diffusion MRI: From Locally to Non-Locally Low-Rank Methods
- P-033** Can Diffusion Models Estimate Quantitative Parameters from Routine Weighted MR Images?
- P-034** Estimating Quantitative MRI Parameters from Diverse Acquisition Protocols using Neural Controlled Differential Equations
- P-036** Uninformed retrospective subsampling overestimates reconstruction quality in TSE
- P-035** Enhancing Anatomical MRI: A K-Space Solution to Artefact Reduction
- P-037** Accelerated Deuterium Metabolic Imaging of Liver Metastases at 7T Using Low-Rank and Subspace Reconstruction with Retrospective Undersampling
- P-039** Towards clinic-ready relaxometry with MR-STAT: multi-site repeatability, motion detection and integration in the clinical data workflow

Hardware Development

- P-038** Explorative performance evaluation of receive arrays with respect to the ultimate intrinsic SNR for 14 T head imaging
- P-040** Next-generation MRI receive-coil arrays for the MR-linac for A prototype r clinical protocol development
- P-041** A 2-Channel Wireless Receive Surface Coil at 1.5T
- P-042** Assessment of RF induced tissue heating at 3T through MR Thermometry with comparison to subject-specific simulations
- P-043** Silent 3D MRSI at Ultrasonic gradient speeds using a dual-axis head insert gradient at 7T
-

Poster Index

ODD numbers in poster session I, EVEN numbers in poster session II

Ultra-High Field

- P-044** Universal B0 shimming for whole-brain MRI at 7T
 - P-045** Feasibility of pTx 1H MRI and single transmit 31P MRSI of the prostate at 7T
 - P-046** Validation method of antenna design for 14T MRI using temperature measurements'
 - P-047** Diffusion MRI of organoids at 28.2T with 3T/m gradient strength
-

Low Field

- P-048** Evaluating repeatability of in vivo imaging in multiple locations using a portable Halbach-based 46 mT scanner
 - P-049** Low acoustic noise scanning at 0.6T
 - P-050** Free-Breathing Functional Lung Imaging at 0.6T compared to 1.5T
 - P-051** Up to four times accelerated musculoskeletal MRI at 0.4T using the CIRIM-network
 - P-052** A fluid-sensitive MRI protocol for the small joints of the hand using a portable 46 mT scanner
-

Simulations and Modeling

- P-053** Sylvester Normalizing Flows for Bayesian Inference in MRS
-

Interventional MRI

- P-054** Physics-Driven Needle Tracking for MR-Guided Percutaneous Interventions
 - P-055** An Extended Reality Interface for Interventional MRI
 - P-056** Physics-Driven Passive Marker Tracking for MR-Guided Endovascular Interventions
-

MRI Acquisition

- P-057** Deep Learning-Based Quantitative MRI Resolution Enhancement via Clinically Accessible Weighted Images Without High-Resolution Training Data

Poster Index

ODD numbers in poster session I, EVEN numbers in poster session II

MRI Acquisition

- P-058** Measuring Echo Shift induced by Magnetic Field Gradients in an Asymmetric Spin Echo Sequence with Echo Planar Imaging Readout
- P-059** Between-site variability of APTw-CEST MRI at 3T
-

Neuro - Diffusion

- P-060** Longitudinal analysis of multi-center harmonized diffusion MRI data in genetic FTD
- P-061** Comparison of a data-driven rank-1 representation and the SHORE basis for efficient undersampling of diffusion MRI
- P-062** Fixel-based tractometry unravels the structural-functional coupling of vision in children with unilateral cerebral palsy
- P-063** Exploring the possibility of predicting the structural connectome from tractography
- P-064** White matter differences related to motor performance in younger and older adults.
- P-065** Changes in the DTI-ALPS index among patients with breast cancer and its association with self-reported outcomes
- P-066** Proof of Concept: A 3D Space for Patient-Specific Functional Connectivity Analysis: Integrating Tractography and Direct Electrical Stimulation.
-

Neuro - Perfusion

- P-067** Detection of Blood-to-CSF Water Transport Using Non-Invasive Long-TE pseudo-Continuous Arterial Spin Labeling in Healthy Mice
- P-068** Evaluating Segmentation Techniques for Circle of Willis in 4D Flow MRI: A Comparative Study
- P-071** Exploring the underlying mechanisms of chronic cerebral blood flow deficits in COVID-19



ANNUAL MEETING 2025

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