

15

7T MRSI of mInS and NAA
in multiple sclerosis

44

DL-reconstructed PD TSE

56

Deep learning reconstruction
in prostate MRI

Editorial Comment

4 Expanding Boundaries¹

Roderic I. Pettigrew
Texas A&M University and Houston Methodist Hospital,
Houston, TX, USA

Neurological Imaging

9 The Increasing Role of 7T MRI in the Neuro- imaging of Cerebral Small Vessel Disease

Zihao Zhang, et al.
Chinese Academy of Sciences, Beijing, China

15 Milestones and Applications of High-Resolution 7T MRSI¹

Gilbert Hangel, et al.
High Field MR Centre, Medical University Vienna, Austria

26 Optimizing EPI Image Quality Beyond Linear Phase Corrections with Dual-Polarity GRAPPA¹

André Fischer, et al.
Siemens Healthineers, Erlangen, Germany

32 Retrospective Motion Correction for Brain MRI: A Technical Description of SAMER¹

Daniel Polak, et al.
Siemens Healthineers, Erlangen, Germany

36 Diffusion-Weighted Imaging of the Brain with Isotropic Resolution using *syngo* RESOLVE with GRAPPA and SMS

Thomas Illigen and Christian Söldner
Siemens Healthineers, Erlangen, Germany

Spotlight

44 Deep Learning MRI Sequences: The Present and the Future

Saif Afat, et al.
Eberhard Karls University Tuebingen, Germany

50 Deep Resolve Boost (DRB) and Sharp (DRS) for Diffusion: ADC Phantom Evaluation

Hyun-Soo Lee, et al.
Siemens Healthineers, Seoul, Republic of Korea

Men's Health

56 The Expanding Role of Deep Learning Reconstruction in Prostate MRI

Paulo Gil Agostinho, et al.
Hospital da Luz, Coimbra, Portugal

Expert Insights

64 My favourite feature: Append Table Positioning Strategy

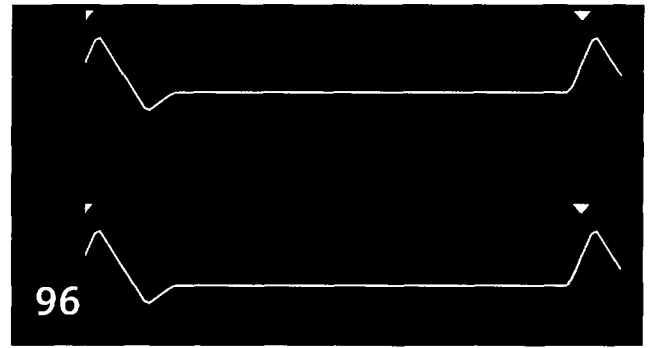
Cristiana Araújo
Siemens Healthineers, Porto, Portugal



0.55T MRI of a patient with rheumatoid arthritis



Fetal low field MRI³



How to deal with arrhythmia in cardiac MRI

Musculoskeletal Imaging

66 Imaging of the Musculoskeletal System Using 0.55T MRI

Tobias Pogarell and Rafael Heiss
Institute of Radiology, University Hospital Erlangen, Germany

73 Exploring the Potential of Low-Field Musculoskeletal MRI at 0.55T: Preliminary Results in Patients with Large Metal Implants²

Hanns-Christian Breit, et al.
University Hospital Basel, Switzerland

Fetal Imaging

78 Fetal³ Low Field MRI – the First 150 Cases

Jana Hutter, et al.
School of Biomedical Engineering, King's College London, UK

Cardiovascular Imaging

85 Cardiac MRI on the MAGNETOM Free.Max

Orlando P. Simonetti, et al.
The Ohio State University, Columbus, OH, USA

96 How to Deal with Arrhythmia in Cardiac MRI

Christian Houbois, et al.
University of Toronto and Sunnybrook Health Sciences Centre, Toronto, ON, Canada

106 Skip the Electrodes, But Not A Beat: The Engineering Behind the Beat Sensor

Peter Speier and Mario Bacher
Siemens Healthineers, Erlangen, Germany

Meet Siemens Healthineers

118 Introducing Katie Grant

Senior Director for MR Marketing and Sales Operations in North America, Minneapolis, MN, USA

119 Introducing Tom Hilbert

Quantitative Imaging Enthusiast & Acquisition and Reconstruction Expert at the Swiss Innovation Hub, Lausanne, Switzerland

¹Work in progress. The product is still under development and not commercially available. Its future availability cannot be ensured.

²The MRI restrictions (if any) of the metal implant must be considered prior to patient undergoing MRI exam. MR imaging of patients with metallic implants brings specific risks. However, certain implants are approved by the governing regulatory bodies to be MR conditionally safe. For such implants, the previously mentioned warning may not be applicable. Please contact the implant manufacturer for the specific conditional information. The conditions for MR safety are the responsibility of the implant manufacturer, not of Siemens Healthineers.

³MR scanning has not been established as safe for imaging fetuses and infants less than two years of age. The responsible physician must evaluate the benefits of the MR examination compared to those of other imaging procedures.