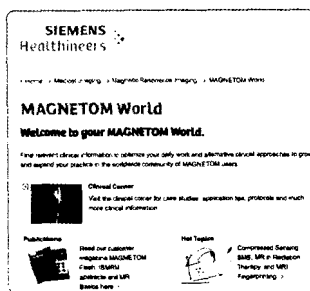


Content



Learn from the experience of other MAGNETOM users

The MAGNETOM World is the community of Siemens MR users worldwide, providing you with relevant clinical information. Here you will find application tips and protocols to optimize your daily work. Lectures and presentations from experts in the field will allow you to be exposed to new ideas and alternative clinical approaches.

Put the advantages of the MAGNETOM World to work for you!

siemens.com/magnetom-world

Editorial Comment

- 2 CMR – a routine tool for clinical decision-making and an exciting research instrument – The non-invasive chance to improve the understanding of cardiology**
Jeanette Schulz-Menger, University Medicine Berlin, Charité Campus Buch, HELIOS Clinics Berlin Buch, Germany

Business

- 8 Cardiac MRI: Image Quality Improvement and Examination Time Shortening After MAGNETOM Avanto^{fit} Upgrade**
Enrico Armando, et al., Ospedale Cardinal Massaia, Asti, Italy

Technology

- 10 Compressed Sensing¹: a Paradigm Shift in MRI**
Christoph Forman, et al., Siemens Healthineers, Erlangen, Germany

Cardiology

- 16 Exercise Cardiac MRI, a Clinical Reality with Compressed Sensing¹**
Wendy Strugnell, et al., The Prince Charles Hospital, Brisbane, Australia
- 21 Cardiovascular Magnetic Resonance – an Effective Approach in Cardiology also Suitable for Very Sick Patients. Case Examples**
Jeanette Schulz-Menger, et al., University Medicine Berlin, Charité Campus Buch, HELIOS Clinics Berlin Buch, Germany
- 27 Stress-Mapping for the Assessment of Myocardial Ischemia: New Potential Clinical Applications of Parametric Mapping**
Juliano L. Fernandes, et al., Radiologia Clinica de Campinas, Campinas, Brazil
- 34 Combined ¹⁸F-FDG PET/MR for Enhanced Imaging of Active Cardiac Sarcoidosis**
Zahi A. Fayad, et al., Mount Sinai, New York, NY, USA
- 40 Combined ¹⁸F-FDG PET/MR in the Diagnostic Work-up of Myocardial Disease**
Zahi A. Fayad, et al., Mount Sinai, New York, NY, USA

- 42 Free-breathing Late Enhancement Imaging: Phase Sensitive Inversion Recovery (PSIR) with Respiratory Motion Corrected (MOCO) Averaging²**
Peter Kellman, et al., National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD, USA

Cardiovascular Imaging

- 51 Differential Diagnosis of Claudication: Cystic Adventitial Degeneration of the Popliteal Artery – Diagnosis by a Combination of MR Angiography and Anatomical Sequences**
Benjamin Henninger, Medical University of Innsbruck, Innsbruck, Austria
- 54 Coronary PET/MR of Micro-Calcification in Atherosclerosis**
Zahi A. Fayad, et al., Mount Sinai, New York, NY, USA
- 56 How-I-do-it: Imaging Proximal Coronary Arteries / Coronary Root Imaging**
Jonathan Richer, Siemens Healthineers, Wayville, SA, Australia
- 60 How-I-do-it: Imaging of Vascular Calcification Using PETRA and StarVIBE**
Marcos P. Botelho, et al., Northwestern Memorial Hospital, Chicago, IL, USA
- 62 Compressed Sensing: Application to Time-of-Flight MR Angiography²**
Tomohisa Okada, et al., Kyoto University, Kyoto, Japan
- 66 Improving Dynamic MR Angiography: Iterative TWIST²**
Bernd J. Wintersperger, et al., University of Toronto, Toronto, Ontario, Canada
- 70 4D Flow MRI² – an Update**
Michael Markl, et al., Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

Meet Siemens Healthineers

- 76 Introducing Christian Geppert, Head of MR Cardiovascular Predevelopment, Erlangen, Germany and Christianne Leidecker, Head of Cardiac Functional Team in the US Collaboration Team, Chicago, IL, USA**