

## **Session Program**

**Aug 12 - 16, 2024**

# **IFIP TC7 System Modeling and Optimization MS 08: Mathematics and Magnetic Resonance Imaging**

Von-Melle-Park 8  
Von-Melle-Park 8, 20146 Hamburg, Germany

## Tue, August 13

9:30 AM

### **MS 08: Mathematics and Magnetic Resonance Imaging: MS08-1**

**Session** | **Location:** Von-Melle-Park 8, Seminarraum 211

09:30 - 10:00 **Model-based Cardiac T1-Mapping**

**Speaker**

Daniel Mackner

10:00 - 10:30 **MRI in chemical engineering applications**

**Speaker**

Stefan Benders

10:30 AM

## Wed, August 14

9:00 AM

### MS 08: Mathematics and Magnetic Resonance Imaging: MS08-2

Session | Location: Von-Melle-Park 8, Seminarraum 211

09:00 - 09:30

#### Quantitative MRI as a non-linear tomography problem: from mathematical principles to clinical demonstration

**Speaker**

Oscar van der Heide

09:30 - 10:00

#### Assessment of Deep Learning-based Reconstruction with Imperfect Ground Truth for MRCP

**Speaker**

Jinho Kim

10:00 - 10:30

#### Robustness of Deep Learning for Accelerated MRI: Benefits of Diverse Training Data

**Speaker**

Reinhard Heckel

10:30 AM

11:00 AM

### MS 08: Mathematics and Magnetic Resonance Imaging: MS 08-3

Session | Location: Von-Melle-Park 8, Seminarraum 211

11:00 - 11:30

#### Mathematical background of ESPIRiT: ESPIRiT versus MOCCA

**Speaker**

Gerlind Plonka

11:30 - 12:00

#### Phase distribution graphs for differentiable and efficient simulations of arbitrary MRI sequences

**Speaker**

Prof. Moritz Zaiss

12:00 - 12:30

#### Motion-compensated cardiac MRI reconstruction with stochastic optimisation

**Speaker**

Letizia Protopapa

12:30 PM