

Session Program

Aug 12 - 16, 2024

IFIP TC7 System Modeling and Optimization

MS 06: Recent advances in PDE-constrained optimization

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

Tue, August 13

11:00 AM

MS 06: Recent advances in PDE-constrained optimization: MS 06-1

Session | **Location:** Von-Melle-Park 8, Seminarraum 207

11:00 – 11:30 **Optimal Control of elliptic PDEs with Wasserstein Regularization**

Speaker

Christian Meyer

11:30 – 12:00

Optimal control of rate-independent systems with non-convex energy

Speaker

Merlin Andreia

12:00 – 12:30

The Pontryagin maximum principle for the optimal control of coefficients of an elliptic differential operator

Speaker

Daniel Wachsmuth

12:30 PM

4:30 PM

MS 06: Recent advances in PDE-constrained optimization: MS 06-2

Session | **Location:** Von-Melle-Park 8, Seminarraum 206

16:30 – 17:00

Adaptive Trust Region Reduced Basis Methods for Parameter Identification Problems

Speaker

Michael Kartmann

17:00 – 17:30

A least-squares space-time approach for parabolic equations

Speaker

Christian Kahle

5:30 PM

Wed, August 14

9:00 AM

MS 06: Recent advances in PDE-constrained optimization: MS 06-3

Session | **Location:** Von-Melle-Park 8, Seminarraum 207

09:00 – 09:30

SQP Method for Hyperbolic PDE-Constrained Optimization in Acoustic Full Waveform Inversion

Speaker

Irwin Yousept

09:30 – 10:00

Image Registration Using Optimal Control of a Linear Hyperbolic Transport Equation

Speaker

Johannes Haubner

10:00 – 10:30

Optimal Control of the Generalized Riemann Problem for Hyperbolic Systems of Conservation Laws

Speaker

Jannik Breitkopf

10:30 AM

11:00 AM

MS 06: Recent advances in PDE-constrained optimization: MS 06-4

Session | **Location:** Von-Melle-Park 8, Seminarraum 207

11:00 – 11:30

Generalized derivatives for the solution operator of the obstacle problem and error estimates for numerical approximations

Speaker

Prof. Stefan Ulbrich

11:30 – 12:00

Robust Parameter and Shape Optimization of Electrical Machines with Isogeometric Analysis

Speaker

Theodor Komann

12:00 – 12:30

Coefficient Control for Variational Inequalities

Speaker

Nicolai Simon

12:30 PM