GAMM2025

Tuesday 8 April 2025

S16: Optimization: S16.01 - Room 9 (16:30 - 18:30)

-**Conveners: Michael Stingl**

time	[id] title	presenter
16:30	[615] Gradient type numerical methods of shape and topological optimization	SOKOLOWSKI, Jan
17:10	[616] Numerical solutions of gradient flow dynamical system for shape optimization in elasticity	TAN, Yixin
17:30	[617] IGA Topology optimization based on topological derivatives	TEIXEIRA, Guilherme Henrique
17:50	[618] Biomimetic Regularization of the Structural Optimization Method - Numerical Aspects	NOWAK, Michał
18:10	[619] Optimizing Printing Nozzle Design for Fused Deposition Modeling	TILLMANN, Steffen

Wednesday 9 April 2025

S16: Optimization: S16.02 - Room 9 (16:30 - 18:30)

  -Conveners: Michał Nowak

time	[id] title	presenter
16:30	[620] Topology optimisation of non-periodic metamaterials via beam-based modelling	WEISSINGER, Philippa
16:50	[621] Process modeling-based optimization of grayscale masked stereolithography 3D printed parts	RUTSCH, Felix
17:10	[622] Minimization of the structural compliance over the elastic moduli with a convex unit cost leads to a nonlinear elasticity problem	LEWIŃSKI, Tomasz
17:30	[623] Topology optimization in civil engineering – on the consideration of concrete failure characteristic and self-weight	MASARCZYK, Daniela
17:50	[624] Topology Optimization Methods for Buckling Structures with Size Constraints	XIAO, Manyu
18:10	[625] Lasserre hierarchy for topology optimization of frame structures under dynamic excitations	TYBUREC, Marek

Thursday 10 April 2025

S16: Optimization: S16.03 - Room 9 (08:30 - 10:30)

-Conveners: Michael Stingl

time	[id] title	presenter
08:30	[626] Convexification can help optimization, at least sometimes	WIRTH, Benedikt
09:10	[627] Abs-Smooth Frank-Wolfe Method: Convergence Analysis and Implementation	TADINADA, Sri Harshitha
09:30	[628] Addressing Risk Aversion in Energy Market Models: A Non-Smooth Optimization Approach	SCHMIDT, Adrian
09:50	[629] How Stringent is the Linear Independence Kink Qualification in Abs-Smooth Optimization?	BETHKE, Franz
10:10	[630] A robust optimization method for functions with discontinuities along lower-dimensional manifolds	IGEL, Lennart

S16: Optimization: S16.04 - Room 9 (14:00 - 16:00)

-Conveners: Benedikt Wirth

time	[id] title	presenter
14:00	[631] Minimum compliance design of grillages via optimal transportation methods	BOŁBOTOWSKI, Karol
14:40	[632] Optimization of fold-patterns on elastic thin plates	SMOCH, Christoph
15:00	[633] Coordinated optimization of actuation and component structures in lightweight dynamic arm-like systems	JANZIK, Felix UTTICH, Eike
15:20	[634] Optimal simulation parameters for modeling phase transformations in steels	POTORSKI, Paweł
15:40	[635] Minimization of non-linear least squares inverse problems via global linearization	ITNER, Dominik

S16: Optimization: S16.05 - Room 9 (16:30 - 18:30)

-Conveners: Michael Stingl

time	[id] title	presenter
16:30	[636] Topology optimization under chance constraints	UIHLEIN, Andrian
16:50	[637] DC-Reformulation for Gradient-L□-Constrained Problems in Function Spaces	HERBERG, Evelyn
17:10	[638] A numerical method for solving the generalized tangent vector	ZHOU, Yizhou
17:30	[639] A least-squares space-time approach for parabolic equations	KAHLE, Christian
17:50	[640] Phase-Field Structural Optimization of Elasto-Plastic Contact Structures	MYŚLIŃSKI, Andrzej
18:10	[641] Neural network function approximation for solving parametric optimization problem via optimality condition penalties	HOFFMANN, Matthias FLASSKAMP, Kathrin

Friday 11 April 2025

S16: Optimization: S16.06 - Room 9 (08:30 - 10:30)

  -Conveners: Tomasz Lewiński

time	[id] title	presenter
08:30	[642] Solving Security-Constrained Optimal Power Flow with Benders Decomposition	HESS, Martin
08:50	[643] Recent advances in real-time optimal power flow of electric distribution networks	CHEN, Shuo
09:10	[644] Stochastic Optimal Control of Heating Networks under Demand Uncertainty	HEIDRICH, Johanna
09:30	[645] Predictive Building Energy Management by Means of Mixed-Integer Optimal Control with Automated Setup	BURDA, Artyom
09:50	[646] Minimizing the maximum cutting temperature of a milling process	KALU-UKA, Abraham
10:10	[647] Efficient Local Optimization of Optical Design Tasks	SEGER, Tobias