GAMM2025

Tuesday 8 April 2025

S19: Optimisation of differential equations: S19.01 - Room 1.25 (08:30 - 10:30)

-Conveners: Philipp Guth; Daniel Walter

time	[id] title	presenter
08:30	[534] A Riemannian View on PDE-constrained Shape Optimisation	ROMERO, Estefania Loayza
09:10	[535] A least-squares space-time approach to parabolic shape optimization	STAHL, Michael
09:30	[537] A combined phase field - sharp interface approach for PDE constrained shape optimization	HINZE, Michael
09:50	[538] Incorporating strain decomposition into fracture propagation simulations using shape optimization algorithms	SUCHAN, Tim

S19: Optimisation of differential equations: S19.02 - Room 1.25 (16:30 - 18:30)

-Conveners: Philipp Guth; Daniel Walter

time	[id] title	presenter
16:30	[553] Continuation methods for higher-order topology optimization	WINKLER, Michael
16:50	[540] Goal-oriented optimal sensor placement for PDE-constrained inverse problems	MATTUSCHKA, Marco
17:10	[541] Material Law Identification in Boundary Value Problems for Fiber Spinning	KANNENGIESSER, Lukas
17:30	[542] New results on optimal control problems with total variaton penalty	HAAF, Nico
17:50	[543] Conditional gradient methods for total variation regularization with PDE constraints	IGLESIAS, José A.
18:10	[544] Optimal control of a Fokker-Planck/transport equation with BV-drift using renormalized solutions	LANGE, Christian

Wednesday 9 April 2025

S19: Optimisation of differential equations: S19.03 - Room 1.25 (08:30 - 10:10)

-Conveners: Philipp Guth; Daniel Walter

time	[id] title	presenter
08:30	[545] Sampling, optimization, SDEs and gradient flows	MAJKA, Mateusz
09:10	[546] Spatial decay of perturbations in optimal control	SCHALLER, Manuel
09:30	[547] A novel distributed method for PDE-constrained GNEPs	SAUER, Felix
09:50	[548] Strategies for robust optimal control of chromatographic separation processes	CEBULLA, Dominik H.

S19: Optimisation of differential equations: S19.04 - Room 1.25 (16:30 - 18:30)

-Conveners: Philipp Guth; Daniel Walter

time	[id] title	presenter
16:30	[549] Optimal control of an ill-posed bloodflow model: Navier-Stokes with do-nothing boundary controls	WAGNER, Jakob
16:50	[550] Output-based receding horizon stabilizing control for linear parabolic equations	RODRIGUES, Sergio S.
17:10	[551] A machine learning based approximation of semi-concave functions with applications to optimal control	VASQUEZ-VARAS, Donato
17:30	[552] The minimum energy estimator for a cubic wave equation	SCHRÖDER, Jesper
17:50	[539] Convergence of variational and iterative regularization methods under a range invariance condition	KALTENBACHER, Barbara

Thursday 10 April 2025

S19: Optimisation of differential equations: S19.05 - Room 1.25 (08:30 - 10:30)

-Conveners: Daniel Walter; Philipp Guth

time	[id] title	presenter
08:30	[554] Numerical Methods and Optimality Conditions for PDE Constrained Optimal Control Problems with Control Variables Appearing Linearly	VOSSEN, Georg
08:50	[555] Newton's method for nonlinear mappings into vector bundles	WEIGL, Laura
09:10	[556] Decomposition methods for mixed-integer optimal control using Pontryagin's principle	HANTE, Falk
09:30	[557] Finite Element Error Analysis of the Beckmann Problem of Optimal Transport	EIDECKER, Niklas
09:50	[558] Optimal control of rate-independent systems with non-convex energy	ANDREIA, Merlin