

PDE Uncertainty Workshop, January 28 – 30, 2020

Program

Tuesday, January 28, 2020	
10:00	REGISTRATION & COFFEE
10:55	OPENING
11:00	Matthias Heinkenschloss (Houston) Optimization methods for the numerical solution of risk-averse PDE-constrained optimization problems
11:45	Francisco José Silva Alvarez (Limoges) On some theoretical and numerical aspects of variational mean field games
12:30 – 14:00	LUNCH BREAK
14:00	Georg Stadler (New York) Extreme event probability computation borrowing ideas from PDE-constrained optimization
14:45	Martin Eigel (Berlin) Low-rank density reconstruction for explicit Bayesian inversion
15:30 – 16:00	COFFEE BREAK
16:00	Andreas Rathsfeld (Berlin) Scatterometry and rough surfaces
16:30	Robert Gruhlke (Berlin) Domain decomposition for random partial differential equations

Wednesday, January 29, 2020

09:00	Jun Zou (Hong Kong) Recent developments on direct sampling methods for general nonlinear inverse problems
09:45	Stefan Ulbrich (Darmstadt) Robust optimization techniques for PDE-constrained optimization under uncertainty
10:30 – 11:00	COFFEE BREAK
11:00	Caroline Geiersbach (Vienna) Stochastic proximal gradient methods for nonconvex problems in Hilbert spaces
11:45	Georg Pflug (Vienna) Some remarks on the projected stochastic gradient algorithm
12:15 – 14:00	LUNCH BREAK
14:00	Martin Gugat (Erlangen) Optimal control subject to probabilistic constraints
14:45	Thomas Michael Surowiec (Marburg) An interior-point approach for a class of risk-averse PDE-constrained optimization problems
15:30 – 16:00	COFFEE BREAK
16:00	Werner Römisch (Berlin) Quantitative stability and Monte Carlo approximations of PDE constrained optimization problems under uncertainty
16:30	Pavel Dvurechensky (Berlin) Distributed optimization for Wasserstein barycenters
19:00	DINNER

Thursday, January 30, 2020

09:30	Kostas Papafitsoros (Berlin) Automatic distributed regularization parameter selection in variational models in imaging via bilevel optimization
10:00	Steven-Marian Stengl (Berlin) Uncertainty quantification of the Ambrosio–Tortorelli approximation in image segmentation
10:30 – 11:00	COFFEE BREAK
11:00	Rüdiger Schultz (Essen) Non-convex stochastic programs
11:45	Pierre Degond (London) On the interplay between kinetic models and games with a continuum of players
12:30	CLOSING