



Workshop on Modeling, Simulation, and Optimization of Uncertain Systems

June 4–5, 2012

Heidelberg Academy of Sciences

Program

Monday, June 4

Time	Speaker	Contribution
<i>Coffee</i>		
9:45	Christian Kirches Ekaterina A. Kostina	Welcome
10:00 – 10:45	Dominique Bonvin (Lausanne)	“Real-Time Optimization in the Presence of Uncertainty”
10:45 – 11:30	Tilmann Gneiting (Heidelberg)	“Assessing uncertainty in complex numerical models: Ensemble copula coupling and the future of weather forecasting”
11:30 – 12:15	Christian Kirches (Heidelberg)	“Numerical methods for fast feedback control”
<i>Break</i>		
14:00 – 14:45	Ekaterina A. Kostina (Marburg)	“Uncertainties and Robustness — from Model Discrimination and Validation to Optimal Control”
14:45 – 15:30	Mario Mommer (Heidelberg)	“On the robustification of optimum experimental design problems”
<i>Coffee break</i>		
16:00 – 16:45	Boris Houska (London)	“Robust Optimization of Dynamic Systems”
16:45 – 17:30	Adrian Ngo (Heidelberg)	“Massively Parallel Geostatistical Inversion of Coupled Processes in Heterogeneous Porous Media”
18:00	<i>Reception at Heidelberg Academy of Sciences</i>	

Tuesday, June 5

Time	Speaker	Contribution
<i>Coffee</i>		
10:00 – 10:45	Michael Dellnitz (Paderborn)	“Set Oriented Numerical Methods for Multiobjective Optimization Problems”
10:45 – 11:30	Marc Steinbach (Hannover)	t.b.a.
11:30 – 12:15	Matthias Gerdts (München)	“Proactive chassis control by optimal control techniques and sensitivity analysis”
<i>Break</i>		
14:00 – 14:45	Mark Podolskij (Heidelberg)	“Inference for Brownian semi-stationary processes”
14:45 – 15:15	Sebastian Engell (Dortmund)	“Optimizing control under uncertainty”
<i>Coffee break</i>		
15:45 – 16:30	Ole Klein (Heidelberg)	“Geostatistical Inversion Under Transient Flow Conditions in Heterogeneous Porous Media”
16:30	Christian Kirches Ekaterina A. Kostina	Farewell