



 **Universität Trier**

**SIGOPT
International Conference
on Optimization 2011**

June 15-17, 2011

Conference Program

SIGOPT - International Conference on Optimization 2011

University of Trier, 54286 Trier, Germany

WWW: <http://www.mathematik.uni-trier.de/> SIGOPT

Supported by

- ◇ The Deutsche Forschungsgemeinschaft (DFG)

Invited Speakers

Mirjam Dür, University of Groningen, Netherlands

Armin Fügenschuh, ZIB Berlin, Germany

René Henrion, WIAS Berlin, Germany

Roland Herzog, TU Chemnitz, Germany

Program Committee

V. Schulz, Trier, Germany

M. Steinbach, Hannover, Germany

S. de Vries, Trier, Germany

R. Schultz, Duisburg, Germany

R. Weismantel, Zürich, Switzerland

E. Sachs, Trier, Germany

R. Tichatschke, Trier, Germany

Scientific Program

Wednesday, June 15, 2011

9:00 – 10:00 : *Henrion, R.*: Progress and challenges in chance-constrained programming

10:00 – 10:30 : **– Coffee Break –**

10:30 – 11:00 : *Möller, A.*: On joint probabilistic constraints with Gaussian coefficient matrix

11:00 – 11:30 : *Borzi, A.*: A Fokker-Planck control framework for multidimensional stochastic processes

11:30 – 12:00 : *Schillings, C.*: On the treatment of uncertainties in aerodynamic design

12:00 – 14:00 : **– Lunch –**

14:00 – 15:00 : *Herzog, R.*: On Optimal Control Problems with Sparsity Terms

15:00 – 15:30 : **– Coffee Break –**

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- 15:30 – 16:00 : *Rösch, A.*: A posteriori verification of optimality for nonlinear optimal control problems
- 16:00 – 16:30 : *Löbhard, C.*: Optimal control of elliptic variational inequalities: A mesh-adaptive finite element solver
- 16:30 – 17:00 : *Fanghänel, D.*: A bilevel problem with a supermodular maximization problem in the lower level
- 17:00 – 17:30 : *Schmidt, S.*: Large Scale Shape Optimization Based on Shape Calculus
- 17:30 – 18:00 : *Stoffel, R.*: Aero-Elastic Shape and Topology Optimization

18:00:

– Dinner –

Thursday, June 16, 2011

9:00 – 10:00 : *Fügenschuh, A.*: Exact and Approximation Algorithms for Soft Rectangle Packing Problems

10:00 – 10:30 : **– Coffee Break –**

Session 1:

10:30 – 11:00 : *Dobre, C.*: Reduction of symmetric semidefinite programs with applications to combinatorial optimization problems

11:00 – 11:30 : *Wickström, A.*: Sensitivity Analysis for non-polyhedral constraint sets, applied to SDPs

11:30 – 12:00 : *Eggert, K.*: Modeling and solving strategies for MINLP network optimization problems from wastewater management

Session 2:

10:30 – 11:00 : *Stein, O.*: Solving nonlinear complementarity problems by smooth optimization

11:00 – 11:30 : *Gross, B.*: Improved Monte Carlo Schemes and an Application to Finance

11:30 – 12:00 : *Hübner, J.*: Structure-exploiting parallel solver for tree-sparse KKT systems

12:00 – 14:00 : **– Lunch –**

Session 1:

- 14:00 – 14:30 : *Oucherif, D.*: KKT solvers for transient optimization in gas and water networks
- 14:30 – 15:00 : *Schmidt, M.*: MPCC Based Primal Heuristics for MINLPs
- 15:00 – 15:30 : *Willert, B.*: High accuracy modeling of gas networks
- 15:30 – 16:00 : *Humpola, J.*: Mathematical Optimization for Extension Planning of Gas Transportation Networks

Session 2:

- 14:00 – 14:30 : *Steuer mann, P.*: Feasible solvers for semi-infinite programming with arbitrary index sets
- 14:30 – 15:00 : *Shikhman, V.*: Bilevel Optimization: on the Structure of the Feasible Set
- 15:00 – 15:30 : *Cervinka, M.*: Relaxed pessimistic solutions to MPECs: numerical experience
- 15:30 – 16:00 : *Werner, R.*: A derivative free method for nonlinear SDPs

16:00: : **– Coffee Break –**

17:00: **Departure Hambacher Schloss
(guided tour + dinner)**

Friday, June 17, 2011

9:00 – 10:00 : *Dür, M.*: Recent Developments in Copositive Programming

10:00 – 10:30 : **– Coffee Break –**

10:30 – 11:00 : *Kanzow, C.*: On the Solution of the KKT Conditions of Generalized Nash Equilibrium Problems

11:00 – 11:30 : *Dorsch, D.*: A Constructive Approach to Newton Methods in Nonsmooth Optimization

11:30 – 12:00 : *Rosenbaum, B.*: Efficient Aerodynamic Surrogate Models Using Kriging and Generic Functions

12:00: : **– Lunch –**
