



IGDK Munich-Graz Annual Colloquium 2017

Haus der Bayerischen Landwirtschaft, Herrsching am Ammersee

Thursday, 30.11.2017

- 09:30 - 09:45** **Welcome address: Boris Vexler and Karl Kunisch**
- 09:45 - 10:00 **Lucas Bonifacius:** Finite element discretization of time-optimal control problems subject to parabolic equations
- 10:10 - 10:25 **Daniel Schaden:** Multifidelity estimators in optimal control
- 10:35 - 11:00** *Coffee break*
- 11:00 - 11:15 **Johannes Haubner:** Theoretical aspects of shape optimization for unsteady fluid-structure interaction
- 11:25 - 11:40 **Michael Kniely:** Optimal excitation induced charge transfer in photovoltaic devices
- 11:50 - 12:05 **Daniel Walter:** Fast local convergence of the primal-dual active point method
- 12:15 - 13:45** *Lunch*
- 13:45 - 14:00 **Sandro Belz:** Convergence of unilateral flows for Ambrosio-Tortorelli energies and application to fracture mechanics
- 14:10 - 14:25 **Chris Münch:** Hysteresis in limits of fast-slow systems: Convergence rates
- 14:35 - 14:50 **Sandra Marschke:** Optimization of violin bridges - constructing a realistic NURBS geometry and first vibroacoustic simulations
- 15:00 - 15:30** *Coffee break*

Thursday, continued

- 15:30 - 15:45 **Piotr Swierczynski:** Applications of energy-corrected finite element to optimal control and parabolic problems
- 16:00 - 18:15 Separate discussion rounds of PIs and PhD students including election of new student representatives
- 18:30** *Dinner followed by informal scientific exchange*

Friday, 01.12.2017

- 09:00 - 09:15** **Report: Students Workshop 2017**
- 09:25 - 09:40 **Sergejs Rogovs:** Maximum norm estimates for boundary control problems in polygonal domains
- 09:50 - 10:05 **Stefan Dohr:** Space-time BEM for the heat equation
- 10:15 - 11:15 **Poster session** *with coffee*
- 11:15 - 12:45** *Lunch*
- 12:45 - 13:45 **Poster session** *continued*
- 13:45 - 14:00 **Sören Behr:** Unbounded control operators for bilinear systems
- 14:10 - 14:25 **Sebastian Engel:** Optimal control of the linear wave equation by BV-functions in time
- 14:35 - 14:50** **Concluding words** *followed by coffee*
- 15:30** *Departures via Taxi to Munich Airport (Graz Members) and via Shuttle Bus to Herrsching Tube Station (see lists)*