

# 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 timeoptimal 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)