

# Workshop Program Overview

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WEDNESDAY, JULY 25		
09:00 – 09:30		<i>Registration</i>
09:30 – 09:40		<i>Welcome Remarks</i>
09:40 – 10:10	P. Binev	On the greedy approach to the reduced basis method
10:15 – 10:45	M. Schaefer	A Reduced Basis Approach for Multiscale Optimization Problem
10:50 – 11:05		<i>Coffee Break</i>
11:10 – 11:40	E. Sachs	Preconditioning for PDE-constrained optimization using proper orthogonal decomposition
11:15 – 12:15	A. Alla	An adaptive POD approximation method for the control of evolutive equations
12:20 – 12:50	Y. Yue	Accelerating PDE-Constrained Optimization by Model Order Reduction with Error Control
12:55 – 14:30		<i>Lunch</i>
14:30 – 15:00	A. Veeseer	On the reliability of the dual weighted residual method
15:05 – 15:35	T. Carraro	Adaptive finite elements for optimal experimental design
15:40 – 16:20		<i>Coffee Break with Postersession</i>
16:20 – 16:50	M. Braack	Flow problems on varying spatial meshes
16:55 – 17:25	F. Tantardini	$L^2$ -projection and quasi-optimality in the spatial discretization of the heat equation

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THURSDAY, JULY 26

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09:00 – 09:30	G. Rozza	Shape parametrization and computational reduction for viscous flows simulations in varying geometries
09:35 – 10:05	B. Kiniger	A posteriori error estimation in shape optimization
10:10 – 10:40	R. Zimmermann	Fast reduced-order steady-state solutions to the Navier-Stokes equations for full-scale aircraft configurations at cruise conditions
10:45 – 11:00	<i>Coffee Break</i>	
11:05 – 11:35	M. Peter	Reduced models and adaptive simulation of chemical degradation mechanisms in porous media with evolving microstructure
11:40 – 12:10	A. Rieß	Simulation and Optimization of large bore combustion engines using model order reduction
12:15 – 14:00	<i>Lunch</i>	
14:00 – 14:30	R. H. W. Hoppe	Snapshot Location by Error Equilibration in Proper Orthogonal Decomposition for Linear and Semilinear Parabolic Partial Differential Equations
14:35 – 15:05	A. Vendl	Model Order Reduction for Aerodynamics
15:10 – 15:25	<i>Coffee Break</i>	
15:30 – 16:00	M. Grepl	A Certified Reduced Basis Approach for Parametrized Linear-Quadratic Optimal Control Problems
16:05 – 16:35	D. Clever	Towards a Fully Space-Time Adaptive Multilevel Optimization Environment
16:40 – 17:10	M. Geiger	Indirect multiple shooting with spatial mesh adaptation for PDE constrained optimal control problems

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FRIDAY, JULY 27

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09:00 – 09:30	F. Tröltzsch	On adaptive numerical methods for elliptic optimal control problems of semi-infinite type
09:35 – 10:05	M. Uzunca	Discontinuous Symmetric Interior Penalty Galerkin (SIPG) method for Nonlinear Diffusion-Convection-Reaction Problems
10:10 – 10:40	B. Karasözen	Adaptive Discontinuous Symmetric Interior Penalty Galerkin (SIPG) method for Convection Dominated Distributed Optimal Control Problems
10:45 – 11:00	<i>Coffee Break</i>	
11:05 – 11:35	J. Heiland	Direct Discretization of Input/Output Maps and Application to Flow Control
11:40 – 12:10	A. Springer	Almost third order convergent time discretization for control constrained parabolic optimal control problems
12:15 – 12:30	<i>Closing Remarks</i>	

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