SUMMER SCHOOL 2010

Optimal Control of Partial Differential Equations

Cortona, July, 12-17, 2010

CONTRIBUTED TALKS

THURSDAY, July 15

Afternoon session

15.00 M. Dihlmann

Basis construction for reduced basis methods using adaptive grids

15.25 A. Manzoni, G. Rozza

Model order reduction for shape optimization of cardiovascular geometries

15.50 H. Antil

Reduced order method with a-priori error bounds for optimal control and shape optimization problems

16.15 B. Wieland

Reduced basis methods for parametric partial differential equations with stochastic influences

Coffee Break

17.00 C. Landry

How to avoid collisions between translating robots

17.25 D. Kotenko

Gauss-Newton-type nonlinear unconstrained optimization methods applied to image restoration in cell volume calculation

17.50 D. Klindworth

Parameter identification in laser welding processes with reduced basis approximation

FRIDAY, July 16

Morning session

11.15 K. Krumbiegel

On the convergence and second order sufficient optimality conditions of the virtual control concept for semilinear state constrained optimal control problems

11.40 D. Cavaglieri

Control of turbulent channel flows for drag reduction

12.05 C. Leithauser

Supremum norm shape optimization

12.30 F. Bonnans, F. Silva

Asymptotic expansion for the solution of a penalized control constrained semilinear elliptic problem

Afternoon session

17.00 N. Mayer

Control problems with disturbances and state constraints: dynamical programming and grid methods

17.25 A. Alla

Optimal control of evolutive PDEs via POD and HJB