

07.07.2011

Im Oberseminar

Numerik

wird am

Montag, dem 25. Juli 2011,

folgender Vortrag gehalten:

Prof. Dr. Jan Carsten Ziemer

TU Darmstadt

"Multilevel Optimization with Reduced Order Models for PDE-Constrained Problems"

Zeit: 10.15 Uhr

Raum: F 420

Interessenten sind herzlich willkommen!

gez. Stefan Volkwein

Abstract:

We present an adaptive multilevel generalized SQP-method for optimal control problems governed by nonlinear PDEs with control constraints. During the optimization iteration the algorithm generates a hierarchy of adaptively refined discretizations. The discretized problems are then each approximated by an adaptively generated sequence of reduced order models. The adaptive refinement strategies are based on error estimators for the original and the discretized PDE, adjoint PDE and a criticality measure. Numerical results are presented.