



# Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg  
Lehrstuhl für Wissenschaftliches Rechnen IX

*Prof. Dr. Christian Meyer*

Fakultät für Mathematik der Technischen Universität Dortmund

## **Second-order sufficient conditions for optimal control of static elastoplasticity with linear kinematic hardening**

The talk presents necessary and sufficient optimality conditions for an optimal control problem governed by a variational inequality (VI) in mixed form. The VI models static elastoplastic deformation processes. Since the control-to-state map is not Gateaux-differentiable, the derivation of optimality conditions is not standard. We will first show that the control-to-state map is Bouligand differentiable. This then allows to derive sufficient optimality conditions which mimic the ones known from finite dimensional MPECs.

Ort: Raum 30.02.003 (2. Stock) (Mathegeb. 30 West) Zeit: Dienstag, 24.07.2012, um 11.00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.

*gez. Prof. Dr. Alfio Borzi*

*gez. Prof. Dr. Bastian von Harrach*