



Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg
Lehrstuhl für Wissenschaftliches Rechnen IX

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Institute for Mathematics and Scientific Computing
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Parabolic control problems in measure spaces

Formulating control problems in a measure space is motivated by the observation that the resulting optimal controls possess sparsity properties (i.e. have small support), which is desirable in many applications such as optimal sensor or actuator placement. For the appropriate functional-analytic setting, there exists a straightforward approximation framework that retains the structural properties of the norm in the measure-valued Banach space and allows the derivation of optimality conditions that are amenable to the numerical solution by a semismooth Newton method. In particular, although the state is discretized, the control problem is still formulated and solved in measure space. Numerical results demonstrate the sparsity structure of the optimal controls.

Ort: Raum 30.02.003 (2. Stock) (Mathegeb. 30 West) Zeit: Dienstag, 05.06.2012, um 12.00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.

gez. Prof. Dr. Alfio Borzi

gez. Prof. Dr. Bastian von Harrach