Einladung zum

Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Fakultät für Mathematik und Informatik

Prof. Dr. Daniel Wachsmuth

JMU Würzburg

Antrittsvorlesung: Optimal control of partial differential equations

Mittwoch, den 28. Nov. 2012 • 16:15 Uhr
Mathematik Ost (Emil-Fischer-Straße 40), Seminarraum SE40 (Raum 00.001)

Inhaltsangabe

Many technical applications can be modeled by partial differential equations. Here, it becomes important to optimize these processes and their parameters, which results in the formulation of an infinite-dimensional optimization and optimal control problem. These optimization problems are often complemented by inequality constraints that mimic technical limitations like for instance maximal temperatures or minimal lift.

Such optimization problems cannot be solved by hand in general. Hence, it is important to study finite-dimensional approximations that can be solved with the help of computers. Here it is crucial to employ efficient discretization schemes. In order to develop efficient discretizations it is essential to investigate and exploit the structure of the optimization problem. In the talk we briefly introduce some theoretical background and outline current research topics.

Zu diesem Vortrag laden wir Sie herzlich ein.
Im Anschluss an die Vorträge Kaffee und Tee im Foyer vor dem SE40.

Die Dozentinnen und Dozenten der Mathematik