

Einladung zum Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Institut für Mathematik

Prof. Dr. Volker Schulz

(Department of Mathematics, University of Trier)

Mathematics for Industrial Design

Mittwoch 23.11.2011 • 17:00

Mathematik Ost (Emil-Fischer-Straße 40) • Seminarraum SE40 (Raum 00.001)

Abstract. Industrial design aims at functional shapes and thus requires the solution of shape optimization problems. This presentation discusses fundamental questions of mathematical shape optimization in industrial context and surveys numerical approaches. In particular, the usage of the shape calculus-including second shape derivatives-accelerates numerical approaches to shape optimization with PDE constraints significantly. Numerical results achieved in specific application areas like aircraft design, design of acoustic horns and design of heating plates will be presented.



www.mathematik.uni-wuerzburg.de/kolloquium.html

Zu diesem Vortrag laden wir Sie herzlich ein.
Kaffee und Tee eine halbe Stunde vor dem Vortrag im Besprechungsraum 00.006 Mathematik Ost.
Die Dozentinnen und Dozenten der Mathematik

