

MATHEMATISCHES KOLLOQUIUM

UNIVERSITÄT
**DUISBURG
ESSEN**

Offen im Denken

Prof. Dr. Michael Hintermüller

Humboldt-Universität Berlin

**"Non-smooth Structures in PDE-constrained
Optimization"**

Motivated by several applications ranging from polymere membrane formation, solar concentrators or liquid displays, to spot markets for gas transport, optimal control problems with non-smooth structures are discussed. The latter occur in form of variational inequalities or lead to generalized Nash games with partial differential equations (PDEs).

Besides existence analysis, the derivation of stationarity conditions is discussed and tailored solution algorithms are highlighted. Aspects of the associated numerical realization are addressed and numerical results are provided.

Ort: Universität Duisburg-Essen, Fakultät für Mathematik, Thea-Leymann-Str. 9, 45127 Essen, Raum WSC-S-U-4.02

Zeit: Mittwoch, 11. Januar 2017 um 17:15 Uhr

Vor dem Vortrag gibt es ab 16:45 Uhr Gelegenheit zum Gespräch bei Kaffee und Tee in Raum WSC-S-4.05.

Die Dozenten der Mathematik