Kolloquium Angewandte Mathematik
Prof. Thomas Apel (BAU1)
Prof. Matthias Gerdts (LRT1)
Prof. Joachim Gwinner (LRT1)
Prof. Markus Klein (LRT1)

der Bundeswehr
Universität *München*

Vortragsankündigung

Am **Dienstag, den 23.01.2018,** hält **um 17:00 Uhr**

Daniel Walter
(TUM)

einen Gastvortrag über das Thema

Optimization in spaces of vector measures

Der Vortrag findet im **Raum 3401** in **Gebäude 33** statt.

Vortragszusammenfassung

In this talk we focus on optimization problems in which we discuss the existence of optimizers, first order optimality conditions as well as sufficient conditions for the existence of a sparse optimizer, i.e. an optimal solution which is only supported on finitely many points in the spatial domain. For the numerical solution we propose and analyze a conditional gradient algorithm for which a sublinear rate of convergence is proven. We introduce additional acceleration steps that lead to a geometric rate of convergence under suitable conditions. The talk is completed by several concrete applications, including the identification of acoustic point sources and the optimal placement of measurement sensors for the identification of an unknown parameter entering a partial differential equation.

Alle Interessierten sind dazu herzlich eingeladen.