

EINLADUNG ZUM MATHEMATISCHEN KOLLOQUIUM

Es spricht

Frau Prof. Dr. Kathrin Klamroth
(Universität Wuppertal)

zum Thema:

Multiple Objective Counterparts: Trading-Off between Optimization Criteria and Constraints

In practical applications of Mathematical Optimization it is frequently observed that the decision maker prefers apparently suboptimal solutions. A natural explanation for this phenomenon is that the applied mathematical model did not fully represent all the decision makers criteria and constraints. Multiple objective optimization approaches are specifically designed to incorporate such complex preference structures, and they gain more and more importance in various application areas like engineering design and supply chain management.

In this talk, we link different concepts of constraint handling, robust optimization and stochastic programming through the formulation of multiple objective counterparts. We argue that, by providing trade-off information between alternative efficient solutions, the multiple objective counterpart can facilitate the decision making process when deciding for a most preferred solution. In this context, we discuss generic, scalarization based solution methods for discrete as well as for continuous multiple objective optimization problems that aim at a concise representation of the nondominated set.

**Mittwoch, 10.01.2018, 17:00 Uhr, Raum C 113 im Curiebau
(Kaffee 16:30 Uhr im Raum C 325)**

Alle Interessenten sind herzlich eingeladen.

Die Hochschullehrer des Institutes