

VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

Zeit: Mittwoch, 9. November 2016, 17:30 Uhr

Ort: Raum 202, Gebäude 11.40

Es spricht: Prof. Dr. Kathrin Klamroth, Bergische Universität Wuppertal

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

Abstract: 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.

Die Vorträge zum Operations Research wenden sich an alle Interessierten!

Ab 17:00 Uhr ist am Institut für Operations Research (Gebäude 11.40, Raum 226) Gelegenheit zu einem Gespräch mit der Referentin bei einer Tasse Kaffee gegeben.

Bei Rückfragen wenden Sie sich bitte an:

Prof. Dr. Oliver Stein, Institut für Operations Research.