

VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

Zeit: Dienstag, 17. Juli 2018, 15:00 Uhr

Ort: Raum 320, Gebäude 09.21

Es spricht: Dr. Lorenzo Lampariello, Roma Tre University, Italy

Zum Thema: **A dominance maximization approach to multi-objective optimization**

Abstract: We present a nonlinear programming approach for optimization problems with multiple criteria. Specifically, in the context of no-preference methods, we propose to compare among all the feasible solutions by choosing the ones that maximize the product of the distances between the corresponding objectives values and those of a suitable reference point. We show that this approach has distinctive and remarkable features. While being not influenced by how the objectives are scaled, it provides one with a Pareto optimal solution that “dominates the most” with respect to the reference point. Furthermore, although our no-preference strategy generally requires the solution of a nonconvex (constrained) single-objective problem, we show how a resulting (global) optimal solution can be easily and efficiently computed.

This is joint work with Francesco Cesarone, Roma Tre University, and Simone Sagratella, Sapienza University of Rome.

Die Vorträge zum Operations Research wenden sich an alle Interessierten!

Bei Rückfragen wenden Sie sich bitte an:
Prof. Dr. Oliver Stein, Institut für Operations Research.