

VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

Zeit: Donnerstag, 10. Dezember 2015, 17:30 Uhr

Ort: Raum 253, Gebäude 11.40

Es spricht: Sibel Alumur Alev, University of Waterloo

Zum Thema: **The Design of Capacitated Intermodal Hub Networks with Different Vehicle Types**

Abstract: In this study, we allow using alternative transportation modes and different types of vehicles in the hub networks to be designed. The aim of the problem is to determine the locations and capacities of hubs, which transportation modes to serve at hubs, allocation of non-hub nodes to hubs, and the number of vehicles of each type to operate on the hub network to route the demand between origin-destination pairs with minimum total cost. Total cost includes fixed costs of establishing hubs with different capacities, purchasing and operational costs of vehicles, transportation costs, and material handling costs. A mixed-integer programming model is developed and a variable neighborhood search algorithm is proposed for the solution of this problem. The heuristic algorithm is tested on instances from the Turkish network and CAB data set. Extensive computational analyses are conducted in order to observe the effects of changes in various problem parameters on the resulting hub networks.

Die Vorträge zum Operations Research wenden sich an alle Interessierten!

Ab 17:00 Uhr ist am Institut für Operations Research (Gebäude 11.40, Raum 249) Gelegenheit zu einem Gespräch mit dem Referenten bei einer Tasse Kaffee gegeben.

Bei Rückfragen wenden Sie sich bitte an:

Prof. Dr. Stefan Nickel, Institut für Operations Research.