

# VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

*Zeit:* Donnerstag, 29. Juni 2017, 17:00 Uhr

*Ort:* Raum New York, Gebäude FZI Forschungszentrum Informatik

*Es spricht:* Prof. Dr. rer. pol. Michael Schneider, Deutsche Post Lehrstuhl für Optimierung von Distributionsnetzwerken, RWTH Aachen

*Zum Thema:* **Routing Electric Vehicles: Problem Variants, Methods, and Future Challenges**

*Abstract:* Electric commercial vehicles (ECVs) have several advantages compared to internal combustion commercial vehicles, like no local greenhouse gas and only minimal noise emissions, but they are still not competitive from a cost point of view. One important aspect in paving the way for their long-term success is their cost-efficient operation in last-mile delivery operations. This entails the investigation of so-called electric vehicle-routing problems (EVRPs), which cover the limited driving range of ECVs and the possibility of recharging their battery at charging stations along the route. In this talk, we give an overview of the variants of ECVs treated in the literature, and we describe important components of successful heuristic solution approaches. In particular, we propose to consider EVRPs as a special variant of VRPs with intermediate stops and to concentrate on the development of more general solution frameworks for this class of problems. Finally, we outline interesting topics for future research.

**Die Vorträge zum Operations Research wenden sich an alle Interessierten!**

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