Transportation Center Seminar

“Integrated Planning of Bin Allocation and Vehicle Routing in Solid Waste Collection”

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Abstract:
The collection and treatment of waste is one of the most difficult and expensive problems faced by local authorities. We consider problems in the area of waste collection, which involve several types of waste to be collected. The service frequency over a given planning period has to be determined for a number of waste collection sites. The location of these collection sites is fixed and known a priori, but the bin configuration and sizing have to be decided. The problem is a combination of a vehicle routing and a bin allocation problem in which the trade-off between the associated costs has to be considered.

Bio:
Vera Hemmelmayr is assistant professor at WU Wien (Vienna University of Economics and Business). She received her Ph.D. from the University of Vienna. Before joining WU, she worked at University of Vienna and at CIRRELT (Montreal) as a post-doctoral fellow. She was a visiting researcher at Georgia Institute of Technology and University of Bologna. Her research interests include vehicle routing and location problems in the fields of waste collection and city logistics.