

## Themen Seminar Logistikmanagement

- **Operations Research/Management Science:**

**Thema 1** (*Bin packing and cutting stock problems: Mathematical models and exact algorithms*)  
Delorme *et al.* (2016)

**Thema 2** (*The Fixed Charge Transportation Problem: An Exact Algorithm Based on a New Integer Programming Formulation*)  
Roberti *et al.* (2015)

**Thema 3** (*The Three-Dimensional Bin Packing Problem*)  
Martello *et al.* (2000)

**Thema 4** (*The 0-1 Knapsack Problem*)  
Pisinger and Toth (1998)

**Thema 5** (*A branch and bound algorithm for cutting and packing irregularly shaped pieces*)  
Alvarez-Valdes *et al.* (2013)

**Thema 6** (*Maximum-weight stable sets and safe lower bounds for graph coloring*)  
Held *et al.* (2012)

**Thema 7** (*A Branch-and-Repair Method for Three-Dimensional Bin Selection and Packing in E-Commerce*)  
Fontaine and Minner (2023)

**Thema 8** (*Scattered storage assignment: mathematical model and valid inequalities to optimize the intra-order item distances*)  
Albán *et al.* (2023)

**Thema 9** (*The impact of order batching and picking area zoning on order picking system performance*)  
Yu and De Koster (2009)

**Thema 10** (*Variable Neighborhood Search for the Set Orienteering Problem and its application to other Orienteering Problem variants*)  
Pěnička *et al.* (2019)

**Thema 11** (*Timetable synchronization of the last several trains at night in an urban rail transit network*)  
Zhang *et al.* (2024)

- **Transportation:**

**Thema 12** (*An adaptive large neighborhood search approach for multiple traveling repairman problem with profits*)  
Avcı and Avcı (2019)

**Thema 13** (*A Branch-and-Price-and-Cut Algorithm for the Vehicle Routing Problem with Two-Dimensional Loading Constraints*)  
Zhang *et al.* (2022)

**Thema 14** (*A Compact Arc-Based ILP Formulation for the Pickup and Delivery Problem with Divisible Pickups and Deliveries*)  
Jargalsaikhan *et al.* (2021)

**Thema 15** (*A Branch and Price Algorithm for the Heterogeneous Fleet Multi-Depot Multi-Trip Vehicle Routing Problem with Time Windows*)  
Şahin and Yaman (2022)

**Thema 16** (*An exact algorithm for the vehicle routing problem based on the set partitioning formulation with additional cuts*)  
Baldacci *et al.* (2008)

**Thema 17** (*A Branch-and-Cut Algorithm for the Symmetric Generalized Traveling Salesman Problem*)  
Fischetti *et al.* (1997)

**Thema 18** (*A New Exact Algorithm for Single-Commodity Vehicle Routing with Split Pickups and Deliveries*)  
Li *et al.* (2023)

**Thema 19** (*Branch-Cut-and-Price for the Time-Dependent Green Vehicle Routing Problem with Time Windows*)  
Liu *et al.* (2023)

**Thema 20** (*An exact Price-Cut-and-Enumerate Method for the Capacitated Multitrip Vehicle Routing Problem with Time Windows*)  
Yang (2023)

**Thema 21** (*A Branch-Cut-and-Price Approach for the Single-Trip and Multi-Trip Two-Echelon Vehicle Routing Problem with Time Windows*)  
Marques *et al.* (2022)

**Thema 22** (*Nested column generation for split pickup vehicle routing problem with time windows and time-dependent demand*)  
Wu *et al.* (2024)

• **Location Planning:**

**Thema 23** (*Median and Covering Location Problems with Interconnected Facilities*)  
Cherkesly *et al.* (2019)

**Thema 24** (*Revisiting the Hamiltonian  $p$ -median problem: A new formulation on directed graphs and a branch-and-cut algorithm*)  
Bektaş *et al.* (2019)

**Thema 25** (*Compact MILP formulations for the  $p$ -center problem*)  
Ales and Sourour (2018)

# Literatur

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