

25th Symposium on Algorithmic Approaches for Transportation Modelling, Optimization, and Systems

ATMOS 2025, September 18–19, 2025, Warsaw, Poland

Edited by

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Contents

Preface	
<i>Jonas Sauer and Marie Schmidt</i>	0:vii
Committees	
.....	0:ix–0:x
List of Authors	
.....	0:xi–0:xii

Regular Papers

The Fair Periodic Assignment Problem	
<i>Rolf Nelson van Lieshout and Bartholomeüs Theodorus Cornelis van Rossum</i>	1:1–1:16
A Geometric Approach to Integrated Periodic Timetabling and Passenger Routing	
<i>Fabian Löbel and Niels Lindner</i>	2:1–2:19
Directed Temporal Tree Realization for Periodic Public Transport: Easy and Hard Cases	
<i>Julia Meusel, Matthias Müller-Hannemann, and Klaus Reinhardt</i>	3:1–3:22
Visualization of Event Graphs for Train Schedules	
<i>Johann Hartleb, Marie Schmidt, Samuel Wolf, and Alexander Wolff</i>	4:1–4:20
Throughput Maximization in a Scheduling Environment with Machine-Dependent Due-Dates	
<i>Shaul Rosner and Tami Tamir</i>	5:1–5:10
VRP-Inspired Techniques for Discrete Dynamic Berth Allocation and Scheduling	
<i>Konstantinos Karathanasis, Spyros Kontogiannis, Asterios Pegos, Vasileios Sofianos, and Christos Zaroliagis</i>	6:1–6:21
Evaluating Fairness of Sequential Resource Allocation Policies: A Computational Study	
<i>Christopher Hojny, Frits C. R. Spijksma, and Sten Wessel</i>	7:1–7:14
Refined Integer Programs and Polyhedral Results for the Target Visitation Problem	
<i>Sven Mallach</i>	8:1–8:17
Speed-Aware Network Design: A Parametric Optimization Approach	
<i>Ugo Rosolia, Marc Bataillou Almagro, George Iosifidis, Martin Gross, and Georgios Paschos</i>	9:1–9:16
A Genetic Algorithm for Multi-Capacity Fixed-Charge Flow Network Design	
<i>Caleb Eardley, Dalton Gomez, Ryan Dupuis, Michael Papadopoulos, and Sean Yaw</i>	10:1–10:14
Design of Distance Tariffs in Public Transport	
<i>Philine Schiewe, Anita Schöbel, and Reena Urban</i>	11:1–11:20
Separator-Based Alternative Paths in Customizable Contraction Hierarchies	
<i>Scott Bacherle, Thomas Bläsius, and Michael Zündorf</i>	12:1–12:16

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Multi-Criteria Route Planning with Little Regret <i>Carina Truschel and Sabine Storandt</i>	13:1–13:20
Using A* for Optimal Train Routing on Moving Block Systems <i>Stefan Engels and Robert Wille</i>	14:1–14:18
Exact and Heuristic Dynamic Taxi Sharing with Transfers Using Shortest-Path Speedup Techniques <i>Johannes Breitling and Moritz Laupichler</i>	15:1–15:22
A Model for Strategic Ridepooling and Its Integration with Line Planning <i>Lena Dittrich, Michael Rihlmann, Sarah Roth, and Anita Schöbel</i>	16:1–16:20
The Line-Based Dial-a-Ride Problem with Transfers <i>Jonas Barth, Kendra Reiter, and Marie Schmidt</i>	17:1–17:20
Energy-Efficient Line Planning by Implementing Express Lines <i>Sarah Roth and Anita Schöbel</i>	18:1–18:21

Preface

For the 25th time, the ATMOS symposium brought together a diverse community of researchers, students, and practitioners interested in all kinds and aspects of *Algorithmic Approaches for Transportation Modelling, Optimization and Systems*. This year, the ATMOS symposium was hosted by the University of Warsaw in Warsaw, Poland on September 18-19 2025 as part of ALGO 2025, the major European event for everyone with an interest in algorithms.

ATMOS welcomes all submissions which are related to modeling and solving optimization problems related to transportation systems. We received a total of twenty-nine submissions, covering network design, resource allocation, scheduling, and routing, problems that arise in the transportation of goods and in schedule-based and on-demand passenger transport, as well as neighboring problems, which develop and apply a diverse set of exact and heuristic algorithmic approaches and mathematical programming techniques. Besides “classical” cost- and time-related objectives we observe a shift towards including performance indicators related to ecological and social sustainability like emissions or fairness. All manuscripts were reviewed by at least three PC members and were evaluated on originality, technical quality, and relevance to the topics of the symposium. Based on the reviews, the program committee selected eighteen submissions to be presented at the symposium. Altogether, they quite remarkably demonstrate the wide applicability of algorithmic optimization on transportation problems.

In addition, as one of the keynote talks presented at ALGO 2025, Marjan van den Akker (Utrecht University, the Netherlands) kindly agreed to give us “A glimpse into OR for airline operations and why this is (not?) public transportation”.

We would like to thank: the Steering Committee of ATMOS for giving us the opportunity to serve as Program Chairs of ATMOS 2025; all the authors who submitted their papers; the members of the ATMOS 2025 Program Committee and the sub-reviewers for their valuable work in evaluating all the submissions and selecting the papers appearing in this volume; Marjan van den Akker for accepting our invitation to present an invited talk; the ALGO 2025 Organizing Committee, in particular Paweł Rzażewski and Marcin Pilipczuk, for hosting the symposium as part of ALGO 2025. We would also like to acknowledge the use of the EasyChair system for the great help in managing the submission and review processes, and Schloss Dagstuhl for publishing the proceedings of ATMOS 2025 in its OASICS series.

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0:x

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