

26th Symposium on Algorithmic Approaches for Transportation Modelling, Optimization, and Systems

ATMOS 2026, September 3–4, 2026, L'Aquila, Italy

Edited by

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Preface

Transportation systems are characterized by increasing dynamicity, complexity and integration of multiple phases. The effective design, management and optimization of transportation systems call for advanced mathematical models and efficient algorithms.

The Algorithmic Approaches for Transportation Modelling, Optimization and Systems (ATMOS) symposium has been held every year since 2000 and brings together researchers and practitioners interested in modeling and solving optimization problems arising in transportation systems. The ATMOS 2026 symposium was hosted by the University of L'Aquila on September 3–4 2026 in L'Aquila, Italy, as part of ALGO 2026, the major European event for researchers, students, and practitioners in algorithms.

We received a total of forty-one submissions on optimization problems, models and algorithms related to several optimization phases, ranging from strategic network design, to line planning, timetabling/scheduling and operational and real-time rescheduling. The works tackle problems arising in several transport systems, including railway system, maritime and air transport, electric vehicles and bicycle networks, as well as multi-modal systems. They focus both on theoretical complexity aspects and on solving real-life applications, and propose advanced exact and heuristic approaches and mathematical models to address recent challenging aspects such as passengers' behavior and objectives, timetable stability, train dispatching and routing, improving sustainability and reducing environmental impact, middle and last mile delivery, integration of various transport modes and phases and coordination of complex decisions. Each manuscript was reviewed by at least three PC members who evaluated originality, technical quality, and relevance related to the topics of the symposium. Based on the reviews, the program committee selected sixteen submissions to be presented at the symposium. The manuscripts show the wide applicability of algorithmic optimization to transportation problems.

Two submissions stood out during the review process. The paper “Passenger-Based Inter-modal Connection Optimization with Elastic Demands” by Boris Grimm, Ralf Borndörfer, Andrea Fraioli, Paula Franke, Giovanni Luca Giacco, Federico Marinucci and Tommaso Montino received the “Best Paper Award”, and the “Best Student Paper Award” was given to the paper “Finding Maximum-Success Disjoint Paths” by Aaron Neugebauer and Marie Schmidt.

Our schedule of contributed ATMOS talks was complemented by an ALGO 2026 keynote talk given by Renato Werneck (Amazon, California, USA) titled “Optimizing Last-Mile Deliveries at Amazon”.

We would like to thank: the Steering Committee of ATMOS for giving us the opportunity to serve as Program Chairs of ATMOS 2026; all the authors who submitted their papers; the members of the ATMOS 2026 Program Committee and the sub-reviewers for their valuable work in evaluating all the submissions and selecting the papers appearing in this volume; Renato Werneck for accepting our invitation to present an invited talk; the ALGO 2026 Organizing Committee, in particular Stefano Leucci, for hosting the symposium as part of ALGO 2026. 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 2026 in its OASICS series.

August 2026

Valentina Cacchiani and Stefan Funke

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