

Preface

This volume constitutes the proceedings of the second **Workshop on AI-based Planning for Complex Real-World Applications (CAIPT’25)**, held in Bologna, Italy, on October 25th, 2025. CAIPT’25 was co-located with the 28th European Conference on Artificial Intelligence (ECAI). The workshop set out to bring together researchers and practitioners from the different and scattered communities in planning with the aim on discussing and developing ideas on how to tackle the messiness of real-world planning problems.

CAIPT’25 continues and broadens the discussion started at its first instance (CAIPT’24) at the AAAI 2024 in Vancouver, Canada. This year’s program again embraced cross-disciplinarity, emphasizing discussion among symbolic and sub-symbolic planning, learning-augmented decision making, and data- and model-driven approaches that must operate reliably under uncertainty and at scale.

The accepted contributions reflect the cross-disciplinary character of the workshop. In total, there were 16 papers submitted for peer-review to this workshop. After a thorough review by the international program committee nine papers were included in this volume, seven as regular papers and two as short papers.

We were very happy to host Florent Teichteil-Königsbuch (Airbus AI Research) for the workshop keynote. His talk on real-world planning challenges at Airbus offered a tour of problems where even state-of-the-art methods reach their limits. The keynote grounded the discussions in the requirements of real-world industrial use-cases.

As editors, we extend our sincere thanks to the authors for their contributions and to the program committee and reviewers for their thoughtful, timely feedback. We are grateful to our organizing team and to the ECAI community for providing a welcoming venue that values both depth and practicality. These proceedings capture a moment in a rapidly evolving field. We hope they serve not only as a record of current progress, but also as an invitation to continued collaboration across methods, applications, and communities.

The Editors

November 2025



© 2025 This work is licensed under a “CC BY 4.0” license.

Workshop Chairs

Oliver Niggemann	Helmut-Schmidt-University, Hamburg, Germany
Gautam Biswas	Vanderbilt University, Nashville, USA
Andrea Micheli	Fondazione Bruno Kessler, Trento, Italy
René Heesch	Helmut-Schmidt-University, Hamburg, Germany

Program Committee

Alexandre Albore	French Aerospace Lab, Toulouse, France
Kaja Balzereit	University of Applied Sciences Bielefeld, Bielefeld, Germany
Alexander Diedrich	Helmut-Schmidt-University, Hamburg, Germany
Jonas Ehrhardt	Helmut-Schmidt-University, Hamburg, Germany
Florent Teichteil-Königsbuch	Airbus AI Research, Toulouse, France
Argaman Mordoch	Ben-Gurion University, Be'er Scheva, Israel
Stefan Panjkovic	Fondazione Bruno Kessler, Trento, Italy
Ingo Pill	Graz University of Technology, Graz, Austria
Ilche Georgievski	University of Stuttgart, Stuttgart, Germany
Marcos Quinones-Grueiro	Vanderbilt University, Nashville, USA
Patrick Rodler	Klagenfurt University, Klagenfurt, Austria
Enrico Scala	University Brescia, Brescia, Italy
Elisa Tosello	Fondazione Bruno Kessler, Trento, Italy
Luis Miguel Vieira da Silva	Helmut-Schmidt-University, Hamburg, Germany
Niklas Widulle	Helmut-Schmidt-University, Hamburg, Germany
Alois Zoitl	Johannes Kepler University, Linz, Austria

Organizing Committee

Alexander Diedrich	Helmut-Schmidt-University, Hamburg, Germany
Jonas Ehrhardt	Helmut-Schmidt-University, Hamburg, Germany
René Heesch	Helmut-Schmidt-University, Hamburg, Germany
Niklas Widulle	Helmut-Schmidt-University, Hamburg, Germany