

Preface

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These proceedings contain the papers that were presented at the *7th Workshop on Models for Formal Analysis of Real Systems (MARS 2026)*, which took place on 12 April 2026 in Turin, Italy, as a satellite event of the 29th International Joint Conferences on Theory and Practice of Software (ETAPS 2026).

The goal of MARS is to bring together researchers from different communities who are developing formal models of real systems in areas where complex models occur (e.g., networks, cyber-physical systems, hardware/software codesign, biology). The motivation for MARS stems from the following two observations:

- Large case studies are essential to show that specification formalisms and modelling techniques are applicable to real systems, whereas many papers only consider toy examples or tiny case studies.
- Developing an accurate model of a real system takes a large amount of time, often months or years. In most papers, however, salient details of the model need to be skipped due to lack of space, and to leave room for formal verification methodologies and results.

MARS aims at remedying these issues, emphasising modelling over verification, so as to retain lessons learned from formal modelling, which are not usually discussed elsewhere, and which may lay the basis for future analysis and comparison. Examples include:

- Which formalism was chosen, and why?
- Which abstractions have been made, and why?
- How were important characteristics of the system modelled?
- Were there any complications while modelling the system?
- Which measures were taken to guarantee the accuracy of the model?
- How can different modelling approaches be compared on this system?

In addition to these proceedings, the formal models presented at the workshop will be archived in the MARS Repository (<http://mars-workshop.org/repository.html>), a growing, diverse collection of realistic benchmarks. The existence of this repository is a unique feature that makes MARS contributions available to the wider community, so that others can reproduce experiments, perform further analyses, and try the same case studies using different formal methods.

MARS 2026 received 6 submissions. Each submission was carefully reviewed by 3 PC members and after sometimes intense discussions, the PC decided to accept 4 submissions for presentation at the workshop and publication in these proceedings. The workshop programme also contained two keynotes, one by Christel Baier (Dresden University of Technology, Germany) on *Verification meets causality* and one by José Proença (University of Porto, Portugal) on *Analysing Real (Time) Systems with Uppaal, Spreadsheets, and Lince*. We hereby thank Christel and José for accepting our invitations and we thank all authors who submitted their work for their contributions.

We would like to thank the PC members, listed below, and the external reviewer Andrea Turrini (Institute of Software Chinese Academy of Sciences, Beijing, China) for their careful and timely reviewing. We are also grateful to the ETAPS satellite events chairs, Vincenzo Ciancia (CNR–ISTI, Pisa, Italy) and Luca Paolini (University of Turin, Italy) for accepting MARS as a satellite event at ETAPS 2026, and to the local organisers Ferruccio Damiani (University of Turin, Italy) and Barbara Boni and Maria Tacconi (Synesthesia, Turin, Italy) and their team for the smooth organisation and the pleasant interactions concerning organisational matters. We would also like to take this opportunity to thank EasyChair, which automates most of the tasks involved in organising and chairing a workshop. Finally, we thank EPTCS and its editor-in-chief, Rob van Glabbeek, for agreeing to publish the proceedings of MARS 2026.

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