

## PREFACE

---

This special issue collects selected articles of the 24th International Conference on Coordination Models and Languages (COORDINATION'22) held in beautiful Lucca, Italy, hosted by the IMT School for Advanced Studies Lucca, as part of the 17th International Federated Conference on Distributed Computing Techniques (DisCoTec'22).

Modern information systems rely increasingly on combining concurrent, distributed, mobile, adaptive, reconfigurable, and heterogeneous components. This requires new models, architectures, languages, and verification techniques in order to cope with the complexity induced by the demands of today's software development. Coordination languages have emerged as a successful approach by providing abstractions that neatly separate behaviour from communication, therefore increasing modularity, simplifying reasoning, and ultimately enhancing software development. The COORDINATION conference series provides a well-established forum for the growing community of researchers interested in models, languages, architectures, and implementation techniques for coordination.

COORDINATION 2022 solicited high-quality contributions in the following categories:

- Regular long papers describing thorough and complete research results as well as experience reports in the scope of the research topics of COORDINATION;
- Regular short papers describing research in progress or opinion papers on the past of COORDINATION research, on the current state of the art, or on prospects for the years to come;
- Short tool papers describing technological artefacts in the scope of the research topics of COORDINATION;
- Long tool papers describing technological artefacts in the scope of the research topics of COORDINATION;
- Survey papers describing important results and success stories that originated in the context of COORDINATION.

The articles composing this special issue went through a two-phase selection process. Firstly, the articles were chosen among the accepted regular long papers that were highly ranked by the conference's programme committee based on their quality, originality, clarity, and relevance. Their authors were asked to revise and extend their conference versions with extra benefit for the reader, such as full proofs, additional applications and explanations, and an improved presentation. Finally, the extended version of each paper underwent a new reviewing process of two or three rounds with two or three additional reviews, according to the same high standards of the articles of regular issues of LMCS.

This special issue features the following four articles:

---

All articles have already been published in the regular issues of Logical Methods in Computer Science.

- *Sound Approximate and Asymptotic Probabilistic Bisimulations for PCTL* by Massimo Bartoletti, Maurizio Murgia, and Roberto Zunino;
- *A Theory of Formal Choreographic Languages* by Franco Barbanera, Ivan Lanese, and Emilio Tuosto;
- *Space-Fluid Adaptive Sampling by Self-Organisation* by Roberto Casadei, Stefano Mariani, Danilo Pianini, Mirko Viroli, and Franco Zambonelli;
- *A Model of Actors and Grey Failures* by Laura Bocchi, Julien Lange, Simon Thompson, and A. Laura Voinea.

We wish to thank all the authors of submitted papers, all the members of the program committee and the additional external reviewers for their thorough reviewing of the submissions, and the reviewers of the articles submitted to this special issue for their thorough reviewing work and their cooperative attitude. We also thank Fabio Zanasi for his assistance throughout the publication process.

Maurice H. ter Beek & Marjan Sirjani  
COORDINATION 2022 Guest Editors