

# 3rd Symposium on Algorithmic Foundations of Dynamic Networks

SAND 2024, June 5–7, 2024, Patras, Greece

Edited by

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## ■ Preface

This volume contains the papers that were presented at the 3rd Symposium on Algorithmic Foundations of Dynamic Networks (SAND), held in Patras, Greece, June 5–7, 2024. SAND is a new conference whose objective is to become the primary venue for original research on fundamental aspects of computing in dynamic networks and computational dynamics, bringing together researchers from computer science and related areas. SAND is seeking important contributions from all viewpoints, including theory and practice, characterized by a marked algorithmic aspect and addressing or being motivated by the role of dynamics in computing. It welcomes both conceptual and technical contributions, as well as novel ideas and new problems that will inspire the community and facilitate the growth of the area.

The program committee of SAND 2024 consisted of:

- Arnaud Casteigts, University of Geneva, Switzerland (chair)
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- Kostas Tsichlas, University of Patras, Greece
- Laurent Viennot, Inria de Paris, France
- Petra Wolf, University of Bergen, Norway
- Viktor Zamaraev, University of Liverpool, UK

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We are also very grateful to the non-PC-member reviewers who helped us evaluating some of the submissions. Namely, Duncan Adamson, Nada Almaliki, Emmanuel Arrighi, Samuel Baguley, Josefran Bastos, Josh Brunner, Daniele Carnevale, Carlos Zapata Carratala, Argyrios Deligkas, Jenny Diomidova, David Doty, Jérôme Féret, Nathan Flaherty, Thomas Gebhart, Daniel Hader, Thekla Hamm, Allen Ibiapina, David Ilcinkas, Ekhine Iruozki, Evangelos Kipouridis, Ralf Klasing, Nina Klobas, Manish Kumar, Patrick Lambein-Monette, Raul Lopes, Nicolas Martins, Kaalkidan Sahele, Frédéric Simard, George Skretas, Frederick Stock, John Sylvester, Kunihiro Wasa, Cai Wood.

SAND 2024 received 43 submissions. The review process was double-blind and each paper was assigned to at least three members of the program committee with relevant expertise and eventually reviewed by them and/or by additional reviewers whenever needed. The program committee accepted 18 papers as regular papers, and 6 as brief announcements. These papers cover a wide range of topics, including dynamic networks and distributed algorithms, mobile computing and robotics, programmable matter, and temporal and dynamic graph algorithms. Keynote talks were given by distinguished researchers, to whom we are grateful: Thomas Erlebach (Durham University, UK), Thomas Nowak (ENS Paris-Saclay, France), and Andréa W. Richa (Arizona State University, USA).

We wish to thank the members of the various committees of SAND as well as its advisory board, for all the hard work that they have put and which has made it possible to set up a new conference. All have been supportive throughout. We are grateful to the program committee members and to the additional reviewers for devoting time and effort in order to come up with a strong conference program. A special thanks goes to the chairs of the organizing committee, Spyros Kontogiannis, Sotiris Nikolettseas, and Kostas Tsihlias. We are also indebted to the chair of the SAND steering committee, Paola Flocchini, for all her support, and to Sotiris Nikolettseas for handling all the financial aspects.

Above all, we thank the authors for submitting their work to SAND 2024. We can assure the reader that in this volume they will find well-presented ideas and results that make substantial contributions to our knowledge on the role of dynamics in computing. We do believe that this volume will inspire further work and will contribute to the further growth of this exciting research area.

June, 2024

Arnaud Casteigts and Fabian Kuhn

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