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Colette Johnen · Elad Michael Schiller ·
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Stabilization, Safety, and Security of Distributed Systems

23rd International Symposium, SSS 2021
Virtual Event, November 17–20, 2021
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Preface

This volume contains the papers presented at the 23rd International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2021), held virtually during November 17–20, 2021.

SSS is an international forum for researchers and practitioners in the design and development of distributed systems with a focus on systems that are able to provide guarantees on their structure, performance, and/or security in the face of an adverse operational environment.

SSS started as the Workshop on Self-Stabilizing Systems (WSS), the first two of which were held in Austin, USA, in 1989 and in Las Vegas, USA, in 1995. After 1995, the workshop was held biennially until 2005 when it became an annual event. Starting from then, it broadened its scope and attracted researchers from other communities. In 2006, the name of the conference was changed to the International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS).

Due to the COVID-19 pandemic, SSS 2021 was a virtual event.

The authors were asked to align their submission with one of the four tracks:

- Track A. Self-stabilizing Systems: Theory and Practice (chaired by Lelia Blin and Fukuhito Ooshita)
- Track B. Foundations of Concurrent and Distributed Computing (chaired by Jukka Suomela and Philipp Woelfel)
- Track C. Mobile and Robot Computing (chaired by Maria Potop-Butucaru and Xavier Defago)
- Track D. Fault-tolerance, Security, and Privacy (chaired by Christian Scheideler and Moti Yung)

The conference received 48 regular submissions and 8 brief announcement submissions. From these we selected a total of 16 papers for presentation at the conference, leading to an acceptance rate of 33%. In addition, 10 submissions were accepted as brief announcements. The proceedings also include 14 invited papers.

The best paper was awarded to Louis Penet de Monterno, Bernadette Charron-Bost, and Stephan Merz for their paper “Synchronization modulo k in Dynamic Networks”.

The best student paper was awarded to Archak Das, Kaustav Bose, and Buddhadeb Sau for their paper “Exploring a Dynamic Ring without Landmark”.

We are also grateful to our keynote speakers who enriched the program:

- Idit Keidar, Technion - Israel Institute of Technology, Israel
- Michael Luby, University of California, Berkeley, USA
- Nancy Lynch, Massachusetts Institute of Technology, USA
- Ronitt Rubinfeld, Massachusetts Institute of Technology, USA

– Paul Spirakis, University of Liverpool, UK
– Jeffrey Ullman, Stanford University, USA

We hope that you will enjoy reading these excellent and very selective papers.

October 2021

Colette Johnen
Elad Michael Schiller
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