

# Preface

DISC, the International Symposium on Distributed Computing, is an international forum on the theory, design, analysis, implementation, and application of distributed systems and networks. DISC is organized in cooperation with the European Association for Theoretical Computer Science (EATCS).

This volume contains the papers presented at DISC 2015, the 29th International Symposium on Distributed Computing, held during October 7–9, 2015, in Tokyo, Japan. The volume also includes the citation for the 2015 Edsger W. Dijkstra Prize in Distributed Computing, jointly sponsored by DISC and PODC (the ACM Symposium on Principles of Distributed Computing), which was presented at DISC 2015 in Tokyo to Michael Ben-Or and Michael Rabin, for initiating the field of fault-tolerant randomized distributed algorithms.

In total, 136 regular papers and seven brief announcements were submitted. The Program Committee selected 42 contributions out of the 136 submissions for regular presentations at the symposium. Each presentation was accompanied by a paper of up to 15 pages in this volume. Every submission was read and evaluated by at least three members of the Program Committee (PC). The committee was assisted by close to 100 external reviewers. This year preliminary reviews were sent to the authors for rebuttals that were used to inform the PC discussions. Following a two-week discussion period, the PC held a physical meeting in San Sebastian, Spain, on July 19, 2015, with some of the PC members participating electronically. Final consultations were held during the PODC conference, and notifications were sent out as PODC 2015 came to a close. Revised and expanded versions of several selected papers will be considered for publication in a special issue of the journal *Distributed Computing*. Some of the regular submissions that were rejected, but generated substantial interest among the members of the PC, were invited to be published as brief announcements. In total, 14 brief announcements appeared at DISC 2015. Each of the two-page brief announcements summarizes ongoing work or recent results, and it can be expected that these results will appear as full papers in later conferences or journals. Authors of additional papers were invited to present posters at the conference. Eight posters were presented at a special poster session during the conference. A list of the poster titles and authors appears at the end of this volume.

The Best Paper Award for DISC 2015 was presented to Rati Gelashvili for his paper “On the Optimal Space Complexity of Consensus for Anonymous Processes.” The Best Student Paper was presented to Yuezhou Lv for his paper “Local Information in Influence Networks” together with Thomas Moscibroda.

The program featured two keynote talks, one presented by Thomas Moscibroda of Microsoft Research, Beijing, and the other by Michael Ben-Or of the Hebrew University (a co-recipient of the 2015 Dijkstra award). An abstract of the first invited lecture is included in these proceedings. Two workshops were co-located with the DISC symposium this year: the Workshop on Distributed Robotic Swarms (WRDS),

organized by Paola Flocchini, Fukuhito Ooshita, and Yukiko Yamauchi, and the 4th Workshop on Advances on Distributed Graph Algorithms (ADGA) chaired by Keren Censor Hillel. WRDS was held on October 5 and ADGA on October 6. Two tutorials were presented on October 6: “Communication Complexity in Distributed Computing,” by Rotem Oshman, and “Distributed Fault-Tolerant Runtime Verification” by Borzoo Bonakdarpour, Pierre Fraigniaud and Sergio Rajsbaum.

I wish to thank the many contributors to DISC 2015: The authors of the submitted papers, the PC members, who performed a huge and difficult job, the keynote speakers Thomas Moscibroda and Michael Ben-Or, the conference general chairs and local organizers led by the general chairs Toshimitsu Masuzawa and Koichi Wada for the great effort they put in, the publicity chairs Chen Avin and Tal Mizrahi, student fellowship chair Alessia Milani, the workshop organizers and tutorial speakers, the Steering Committee for its guidance, and especially the chair of the DISC Steering Committee Antonio Fernandez Anta.

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