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# Structural Information and Communication Complexity

18th International Colloquium, SIROCCO 2011  
Gdańsk, Poland, June 26-29, 2011  
Proceedings

 Springer

Volume Editors

Adrian Kosowski  
INRIA, Bordeaux Sud-Ouest Research Center  
351 cours de la Libération, 33400 Talence cedex, France  
E-mail: kosowski@labri.fr

Masafumi Yamashita  
Kyushu University  
Department of Computer Science and Communication Engineering  
744, Motooka, Fukuoka, 819-0395, Japan  
E-mail: mak@csce.kyushu-u.ac.jp

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# Preface

The 18th Colloquium on Structural Information and Communication Complexity (SIROCCO 2011) took place during June 26–29, 2011 in Gdansk, Poland. SIROCCO is devoted to the study of communication and knowledge in distributed systems from both the qualitative and quantitative viewpoints. Special emphasis is given to innovative approaches and fundamental understanding, in addition to efforts to optimize current designs. The typical areas include distributed computing, communication networks, game theory, parallel computing, social networks, mobile computing (including autonomous robots), peer-to-peer systems, communication complexity, fault-tolerant graph theories, and randomized/probabilistic issues in networks.

This year, 57 papers were submitted in response to the call for papers, and for each paper, its scientific and presentation quality was evaluated by at least three reviewers. The Program Committee selected 1 survey and 24 regular papers for presentation at the colloquium and publication in this volume, after in-depth discussion.

The SIROCCO Prize for Innovation in Distributed Computing was given to David Peleg (Weizmann Institute of Science) this year for his many and important innovative contributions to distributed computing. These contributions include local computing, robot computing, and the design and analysis of dynamic monopolies, sparse spanners, and compact routing and labeling schemes. Responding to our request, David Peleg gave an invited talk. The Program Committee also invited Colin Cooper (King’s College London) as an invited speaker. These two invited talks are included in this volume.

We would like to express our appreciation to the invited speakers, the authors of all the submitted papers, the Program Committee members, and the external reviewers. We also express our gratitude to the SIROCCO Steering Committee, and in particular to Pierre Fraigniaud for his invaluable support throughout the preparation of this event.

We are also grateful to the organizing team from the Gdansk University of Technology (ETI Faculty), and the Publicity Chair David Ilcinkas. We gratefully acknowledge the financial support of the Gdansk University of Technology, and the resources provided free of charge by Sphere Research Labs.

Finally, we acknowledge the use of the EasyChair system for handling the submission of papers, managing the review process, and generating these proceedings.

June 2011

Adrian Kosowski  
Masafumi Yamashita

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