

# Preface

This volume contains revised versions of papers presented at the 27th International Workshop on Combinatorial Algorithms (IWOCA 2016), held August 17–19, 2016, in Helsinki, Finland.

IWOCA 2016 continued a long and well-established tradition of encouraging high-quality research in theoretical computer science, providing an opportunity to bring together specialists and young researchers working in the area. The IWOCA conference series grew out of a 17-year history of the Australasian Workshop on Combinatorial Algorithms (AWOCA). Previous AWOCA and IWOCA meetings have been held in Australia, Indonesia, South Korea, Japan, Czech Republic, Canada, UK, India, France, the USA, and Italy.

We solicited papers in the broad area of combinatorial algorithms. The Program Committee decided to accept 35 papers, out of a total of 87 submissions. Each submission received at least three reviews. Papers were submitted and reviewed using the EasyChair online system. Authors of accepted papers come from 21 countries, across three continents (Asia, Europe, North America).

The scientific program included three invited lectures, given by:

- Leslie Anne Goldberg on “Approximately Counting list H-Colourings”
- Giuseppe F. Italiano on “2-Connectivity Problems in Directed Graphs”
- Petteri Kaski on “Polynomial Representations in Algorithm Design”

We thank the invited speakers for accepting our invitation and for their excellent presentations at the conference. The program also included an open problem session, chaired by Gabriele Fici. The open problems presented can be found at the open problem collection of IWOCA at <http://iwoca.org>. This year for the second year running, IWOCA had a Best Student Paper Award, sponsored by the European Association for Theoretical Computer Science (EATCS). It was decided to assign this award to the paper “Online Chromatic Number Is PSPACE-Complete” by Martin Böhm and Pavel Veselý.

We thank all authors who submitted their work for consideration to IWOCA 2016. We wish to thank the Program Committee and the external reviewers, whose many thorough reviews helped us select the papers presented. The success of the scientific program is due to their hard work. We also thank the EATCS (European Association for Theoretical Computer Science), Federation of Finnish Learned Societies, and the Helsinki Institute for Information Technology for their support of the conference.

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Simon Puglisi  
Veli Mäkinen  
Leena Salmela

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Mäkinen, V.; Puglisi, S.J.; Salmela, L. (Eds.)

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