13th International Symposium on Parameterized and Exact Computation

IPEC 2018, August 22-24, 2018, Helsinki, Finland

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Preface

This volume contains the papers presented at IPEC 2018: the 13th International Symposium on Parameterized and Exact Computation, which took place on August 22-24 in Helsinki, Finland. IPEC was collocated with five other algorithms conferences as a part of the annual ALGO congress.

The International Symposium on Parameterized and Exact Computation (IPEC, formerly IWPEC) is a series of international symposia covering research in all aspects of parameterized and exact algorithms and complexity. Started in 2004 as a biennial workshop, it became an annual event in 2009.

	Previous IPEC
2004	Bergen, Norway
2006	Zürich, Switzerland
2008	Victoria, Canada
2009	Copenhagen, Denmark
2010	Chennai, India
2011	Saarbrücken, Germany
2012	Ljubljana, Slovenia
2013	Sophia Antipolis, France
2014	Wrocław, Poland
2015	Patras, Greece
2016	Aarhus, Denmark
2017	Vienna, Austria

In response to the call for papers, 48 papers were submitted. Each submission was reviewed by at least 3 reviewers. The reviews came from the 15 members of the program committee, and from 50 external reviewers contributing 145 external reviews. The program committee held electronic meetings through the EasyChair platform. The program committee felt that the median submission quality was very high, and in the end selected 24 of the submissions for presentation at the symposium and for inclusion in this proceedings volume. This year, both the Best Paper Award and the Excellent Student Paper Award distinguish the paper *Counting Induced Subgraphs: A Topological Approach to* #W[1]*-hardness* co-authored by Marc Roth and Johannes Schmitt.

IPEC invited one plenary speaker to the ALGO meeting, Magnus Wahlström, as part of the award ceremony for the 2017 EATCS-IPEC Nerode Prize for outstanding papers in the area of multvariate algorithmics. The award was given by a committee consisting of Dániel Marx, Jianer Chen and Hans L. Bodlaender to Stefan Kratsch and Magnus Wahlström for their paper *Compression via Matroids: A Randomized Polynomial Kernel for Odd Cycle Transversal* (ACM Transactions on Algorithms 10(4): 20:1-20:15 (2014)). IPEC also invited Radu Curtipean to present a tutorial on *Counting Problems in Parameterized Complexity.* Finally, IPEC hosted the ceremony of the 2018 PACE awards. The Parameterized Algorithms and Computational Experiments Challenge (PACE) was conceived in Fall 2015 to deepen the relationship between parameterized algorithms and practice. This volume contains a report by Édouard Bonnet and Florian Sikora on the 2018 PACE challenge.

We would like to thank the program committee, together with the external reviewers, for their commitment in the difficult paper selection process. We also thank all the authors who submitted their work for consideration. Finally, we are grateful to the local organizers of ALGO, chaired by Parinya Chalermsook, Petteri Kaski and Jukka Suomela, for their efforts, which made chairing IPEC an enjoyable experience.

Christophe Paul and Michał Pilipczuk
Montpellier and Warsaw, November 2018

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