

14th International Symposium on Parameterized and Exact Computation

IPEC 2019, September 11–13, 2019, Munich, Germany

Edited by

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Contents

Preface		
<i>Bart M. P. Jansen and Jan Arne Telle</i>	0:vii
Program Committee		
.....	.....	0:ix
External Reviewers		
.....	.....	0:xi
Authors		
.....	.....	0:xiii–0:xvi

Regular Papers

Finding and Counting Permutations via CSPs		
<i>Benjamin Aram Berendsohn, László Kozma, and Dániel Marx</i>	.....	1:1–1:16
Width Parameterizations for Knot-Free Vertex Deletion on Digraphs		
<i>Stéphane Bessy, Marin Bougeret, Alan D. A. Carneiro, Fábio Protti, and Uéverton S. Souza</i>	.....	2:1–2:16
Parameterized Valiant’s Classes		
<i>Markus Bläser and Christian Engels</i>	.....	3:1–3:14
Hierarchy of Transportation Network Parameters and Hardness Results		
<i>Johannes Blum</i>	.....	4:1–4:15
Metric Dimension Parameterized by Treewidth		
<i>Édouard Bonnet and Nidhi Purohit</i>	.....	5:1–5:15
Faster Subgraph Counting in Sparse Graphs		
<i>Marco Bressan</i>	.....	6:1–6:15
Towards a Theory of Parameterized Streaming Algorithms		
<i>Rajesh Chitnis and Graham Cormode</i>	.....	7:1–7:15
FPT Inapproximability of Directed Cut and Connectivity Problems		
<i>Rajesh Chitnis and Andreas Emil Feldmann</i>	.....	8:1–8:20
C-Planarity Testing of Embedded Clustered Graphs with Bounded Dual Carving-Width		
<i>Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta</i>	.....	9:1–9:17
The Complexity of Packing Edge-Disjoint Paths		
<i>Jan Dreier, Janosch Fuchs, Tim A. Hartmann, Philipp Kuinke, Peter Rossmanith, Bjoern Tauer, and Hung-Lung Wang</i>	.....	10:1–10:16
Hardness of FO Model-Checking on Random Graphs		
<i>Jan Dreier and Peter Rossmanith</i>	11:1–11:15

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Computing the Largest Bond of a Graph <i>Gabriel L. Duarte, Daniel Lokshtanov, Lehilton L. C. Pedrosa, Rafael C. S. Schouery, and Uéverton S. Souza</i>	12:1–12:15
Parameterized Algorithms for Maximum Cut with Connectivity Constraints <i>Hiroshi Eto, Tesshu Hanaka, Yasuaki Kobayashi, and Yusuke Kobayashi</i>	13:1–13:15
Multistage Vertex Cover <i>Till Fluschnik, Rolf Niedermeier, Valentin Rohm, and Philipp Zschoche</i>	14:1–14:14
Parameterized Complexity of Edge-Coloured and Signed Graph Homomorphism Problems <i>Florent Foucaud, Hervé Hocquard, Dimitri Lajou, Valia Mitsou, and Théo Pierron</i>	15:1–15:16
On the Fine-Grained Complexity of Least Weight Subsequence in Multitrees and Bounded Treewidth DAGs <i>Jiawei Gao</i>	16:1–16:17
Resolving Infeasibility of Linear Systems: A Parameterized Approach <i>Alexander Göke, Lydia Mirabel Mendoza Cadena, and Matthias Mnich</i>	17:1–17:15
Clustering to Given Connectivities <i>Petr A. Golovach and Dimitrios M. Thilikos</i>	18:1–18:17
Finding Cuts of Bounded Degree: Complexity, FPT and Exact Algorithms, and Kernelization <i>Guilherme C. M. Gomes and Ignasi Sau</i>	19:1–19:15
Finding Linear Arrangements of Hypergraphs with Bounded Cutwidth in Linear Time <i>Thekla Hamm</i>	20:1–20:14
The Independent Set Problem Is FPT for Even-Hole-Free Graphs <i>Edin Husić, Stéphan Thomassé, and Nicolas Trotignon</i>	21:1–21:12
Improved Analysis of Highest-Degree Branching for Feedback Vertex Set <i>Yoichi Iwata and Yusuke Kobayashi</i>	22:1–22:11
Subexponential-Time Algorithms for Finding Large Induced Sparse Subgraphs <i>Jana Novotná, Karolina Okrasa, Michał Pilipczuk, Paweł Rzążewski, Erik Jan van Leeuwen, and Bartosz Walczak</i>	23:1–23:11
Beating Treewidth for Average-Case Subgraph Isomorphism <i>Gregory Rosenthal</i>	24:1–24:14

Invited Paper

The PACE 2019 Parameterized Algorithms and Computational Experiments Challenge: The Fourth Iteration <i>M. Ayaz Dzulfikar, Johannes K. Fichte, and Markus Hecher</i>	25:1–25:23
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Preface

This volume contains the papers presented at IPEC 2019: the 14th International Symposium on Parameterized and Exact Computation, which took place September 11–13 in Munich, Germany. IPEC was co-located with five other algorithmic 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.

In response to the call for papers, 40 abstracts were submitted, which led to 38 submitted papers. Three papers were later withdrawn. Each submission received 3 reviews. The reviews came from the 15 members of the program committee and from 22 external reviewers, together contributing 105 reviews. The program committee held electronic meetings through the EasyChair platform. In the end, the program committee selected 24 of the submissions for presentation at the symposium and inclusion in these proceedings.

The Best Paper Award was given to Giordano Da Lozzo, David Eppstein, Michael Goodrich, and Siddharth Gupta, for their paper *C-Planarity Testing of Embedded Clustered Graphs with Bounded Dual Carving-Width*.

The Best Student Paper Award was given to Gregory Rosenthal for his paper *Beating Treewidth for Average-Case Subgraph Isomorphism*.

IPEC invited one plenary speaker to the ALGO meeting, Raphael Yuster, as part of the award ceremony for the 2019 EATCS-IPEC Nerode Prize for outstanding papers in the area of multivariate algorithmics. The Nerode prize committee consisted of Jianer Chen, Hans L. Bodlaender, and Virginia Vassilevska Williams. They awarded the prize to Noga Alon, Raphael Yuster, and Uri Zwick for their paper *Color-Coding* (Journal of the ACM 42(4): 844–856 (1995)).

IPEC also invited Pasin Manurangsi to present a tutorial on *parameterized inapproximability*. Finally, IPEC hosted the award ceremony and poster session of the fourth *Parameterized Algorithms and Computational Experiments* challenge, PACE. This yearly challenge was conceived in Fall 2015 to deepen the relationship between parameterized algorithms and practice. These proceedings contain a report by M. Ayaz Dzulfikar, Johannes K. Fichte, and Markus Hecher on the 2019 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 Susanne Albers, Ernst Bayer, and Gabriele Doblander, for their work on the local arrangements.

Bart M. P. Jansen and Jan Arne Telle
Eindhoven and Bergen, October 2019



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