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Ernst W. Mayr (Ed.)

# Graph-Theoretic Concepts in Computer Science

41st International Workshop, WG 2015  
Garching, Germany, June 17–19, 2015  
Revised Papers

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# Preface

The 41st International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2015) was held in Garching near Munich in Germany, during June 17–19, 2015. The WG conference series has a long tradition. Since 1975, it has taken place 23 times in Germany, four times in The Netherlands, three times in France, twice in Austria and in the Czech Republic, as well as once in each of Italy, Slovakia, Switzerland, Norway, the UK, Greece, and Israel. The WG conferences aim to connect theory and practice by demonstrating how graph-theoretic concepts can be applied to various areas of computer science and by extracting new graph problems from applications. Their goal is to present new research results and to identify and explore directions of future research. WG 2015 had 79 submissions. Each submission was carefully reviewed by three members of the Program Committee. The Program Committee then accepted 32 papers for presentation at WG 2015.

The WG 2015 Best Paper Award, sponsored by Springer, was awarded to Konstantinos Stavropoulos and his co-authors Martin Grohe, Stephan Kreutzer, Roman Rabinovich, and Sebastian Siebertz, for their paper on “Colouring and Covering Nowhere Dense Graphs.” The program also included three inspiring invited talks: Daniel Paulusma (Durham University, UK) gave a talk on “Open Problems on Graph Coloring for Special Graph Classes,” Shmuel Zaks (Technion, Haifa, Israel) spoke “On the Complexity of Approximation and On-line Scheduling Problems with Applications to Optical Networks,” and Rolf Niedermeier (TU Berlin, Germany) presented “Parameterized Algorithms for Graph Modification Problems: On Interactions with Heuristics.”

We would like to thank all the authors of the papers submitted to WG 2015, the speakers of the 32 contributed and the three invited talks, the members of the Program Committee, and all the 130 external reviewers. Special thanks also go to the Leibniz Supercomputing Centre (LRZ) of the Bavarian Academy of Sciences and Humanities for providing space and support for the sessions and the coffee breaks, and to the members of the local Organizing Committee and the members of the Chair for Efficient Algorithms of the Technical University of Munich (TUM), whose effort made the conference run smoothly and led to such a successful event. Finally, we want to express our thanks for the financial support we received from Springer for the best paper award and from Deutsche Forschungsgemeinschaft (DFG) for (most of) the conference participants.

May 2016

Ernst W. Mayr

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The conference received ample support from the Department of Informatics of the Technical University of Munich (TUM) and also (and in particular) the Leibniz Supercomputing Centre (LRZ) of the Bavarian Academy of Sciences and Humanities.

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More details on the conference are available at  
<http://www.mayr.in.tum.de/konferenzen/WG2015/>



# Contents

## Invited Talks

Parameterized Algorithmics for Graph Modification Problems: On Interactions with Heuristics . . . . .	3
<i>Christian Komusiewicz, André Nichterlein, and Rolf Niedermeier</i>	
Open Problems on Graph Coloring for Special Graph Classes . . . . .	16
<i>Daniël Paulusma</i>	
On the Complexity of Approximation and Online Scheduling Problems with Applications to Optical Networks. . . . .	31
<i>Shmuel Zaks</i>	

## Computational Complexity

The Stable Fixtures Problem with Payments . . . . .	49
<i>Péter Biró, Walter Kern, Daniël Paulusma, and Péter Wojteczky</i>	
Complexity of Secure Sets . . . . .	64
<i>Bernhard Bliem and Stefan Woltran</i>	
Efficient Domination for Some Subclasses of $P_6$ -free Graphs in Polynomial Time . . . . .	78
<i>Andreas Brandstädt, Elaine M. Eschen, and Erik Friese</i>	
On the Tree Search Problem with Non-uniform Costs . . . . .	90
<i>Ferdinando Cicalese, Balázs Keszegh, Bernard Lidický, Dömötör Pálvölgyi, and Tomáš Valla</i>	
An $\mathcal{O}(n^2)$ Time Algorithm for the Minimal Permutation Completion Problem. . . . .	103
<i>Christophe Crespelle, Anthony Perez, and Ioan Todinca</i>	
On the Number of Minimal Separators in Graphs . . . . .	116
<i>Serge Gaspers and Simon Mackenzie</i>	
Efficient Farthest-Point Queries in Two-terminal Series-parallel Networks . . .	122
<i>Carsten Grimm</i>	
A Polynomial Delay Algorithm for Enumerating Minimal Dominating Sets in Chordal Graphs. . . . .	138
<i>Mamadou Moustapha Kanté, Vincent Limouzy, Arnaud Mary, Lhouari Nourine, and Takeaki Uno</i>	

Finding Paths in Grids with Forbidden Transitions . . . . .	154
<i>Mamadou Moustapha Kanté, Fatima Zahra Moataz, Benjamin Momège, and Nicolas Nisse</i>	
The Maximum Time of 2-neighbour Bootstrap Percolation in Grid Graphs and Parametrized Results . . . . .	169
<i>Thiago Marcilon and Rudini Sampaio</i>	
<b>Design and Analysis</b>	
Minimum Eccentricity Shortest Paths in Some Structured Graph Classes . . . .	189
<i>Feodor F. Dragan and Arne Leitert</i>	
Approximating Source Location and Star Survivable Network Problems . . . .	203
<i>Guy Kortsarz and Zeev Nutov</i>	
On the Complexity of Computing the $k$ -restricted Edge-connectivity of a Graph . . . . .	219
<i>Luis Pedro Montejano and Ignasi Sau</i>	
<b>Computational Geometry</b>	
Weak Unit Disk and Interval Representation of Graphs . . . . .	237
<i>M.J. Alam, S.G. Kobourov, S. Pupyrev, and J. Toeniskoetter</i>	
Simultaneous Visibility Representations of Plane $st$ -graphs Using L-shapes . . .	252
<i>William S. Evans, Giuseppe Liotta, and Fabrizio Montecchiani</i>	
An Abstract Approach to Polychromatic Coloring: Shallow Hitting Sets in ABA-free Hypergraphs and Pseudohalfplanes . . . . .	266
<i>Balázs Keszegh and Dömötör Pálvölgyi</i>	
Unsplittable Coverings in the Plane . . . . .	281
<i>János Pach and Dömötör Pálvölgyi</i>	
<b>Structural Graph Theory</b>	
Induced Minor Free Graphs: Isomorphism and Clique-width. . . . .	299
<i>Rémy Belmonte, Yota Otachi, and Pascal Schweitzer</i>	
On the Complexity of Probe and Sandwich Problems for Generalized Threshold Graphs . . . . .	312
<i>Fernanda Couto, Luerbio Faria, Sylvain Gravier, Sulamita Klein, and Vinicius F. dos Santos</i>	

Colouring and Covering Nowhere Dense Graphs. . . . .	325
<i>Martin Grohe, Stephan Kreutzer, Roman Rabinovich, Sebastian Siebertz, and Konstantinos Stavropoulos</i>	
Parity Linkage and the Erdős-Pósa Property of Odd Cycles Through Prescribed Vertices in Highly Connected Graphs. . . . .	339
<i>Felix Joos</i>	
Well-quasi-ordering Does Not Imply Bounded Clique-width. . . . .	351
<i>Vadim V. Lozin, Igor Razgon, and Viktor Zamaraev</i>	
A Slice Theoretic Approach for Embedding Problems on Digraphs . . . . .	360
<i>Mateus de Oliveira Oliveira</i>	
Decomposition Theorems for Square-free 2-matchings in Bipartite Graphs . . .	373
<i>Kenjiro Takazawa</i>	
<b>Graph Drawing</b>	
Saturated Simple and 2-simple Topological Graphs with Few Edges . . . . .	391
<i>Péter Hajnal, Alexander Igamberdiev, Günter Rote, and André Schulz</i>	
Testing Full Outer-2-planarity in Linear Time. . . . .	406
<i>Seok-Hee Hong and Hiroshi Nagamochi</i>	
<b>Fixed Parameter Tractability</b>	
Triangulating Planar Graphs While Keeping the Pathwidth Small . . . . .	425
<i>Therese Biedl</i>	
Polynomial Kernelization for Removing Induced Claws and Diamonds . . . . .	440
<i>Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, and Marcin Wrochna</i>	
Algorithms and Complexity for Metric Dimension and Location-domination on Interval and Permutation Graphs. . . . .	456
<i>Florent Foucaud, George B. Mertzios, Reza Naserasr, Aline Parreau, and Petru Valicov</i>	
On Structural Parameterizations of Hitting Set: Hitting Paths in Graphs Using 2-SAT . . . . .	472
<i>Bart M.P. Jansen</i>	
Recognizing $k$ -equistable Graphs in FPT Time . . . . .	487
<i>Eun Jung Kim, Martin Milanič, and Oliver Schaudt</i>	

Beyond Classes of Graphs with “Few” Minimal Separators: FPT Results  
Through Potential Maximal Cliques. . . . . 499  
*Mathieu Liedloff, Pedro Montealegre, and Ioan Todinca*

**Author Index** . . . . . 513