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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 Algorithmics 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://wwwmayr.in.tum.de/konferenzen/WG2015/

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