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Dimitrios M. Thilikos (Ed.)

Graph-Theoretic Concepts in Computer Science

36th International Workshop, WG 2010
Zarós, Crete, Greece, June 28-30, 2010
Revised Papers

Volume Editor

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Preface

The *36th International Workshop on Graph-Theoretic Concepts in Computer Science* (WG 2010) took place in Zarós, Crete, Greece, June 28–30, 2010. About 60 mathematicians and computer scientists from all over the world (Australia, Canada, Czech Republic, France, Germany, Greece, Hungary, Israel, Japan, The Netherlands, Norway, Poland, Switzerland, the UK, and the USA) attended the conference.

WG has a long tradition. Since 1975, WG has taken place 21 times in Germany, four times in The Netherlands, twice in Austria, twice in France and once in the Czech Republic, Greece, Italy, Norway, Slovakia, Switzerland, and the UK.

WG aims at merging theory and practice by demonstrating how concepts from graph theory can be applied to various areas in computer science, or by extracting new graph theoretic problems from applications. The goal is to present emerging research results and to identify and explore directions of future research. The conference is well-balanced with respect to established researchers and young scientists.

There were 94 submissions, two of which were withdrawn before entering the review process. Each submission was carefully reviewed by at least 3, and on average 4.5, members of the Program Committee. The Committee accepted 28 papers, which makes an acceptance ratio of around 30%. I should stress that, due to the high competition and the limited schedule, there were papers that were not accepted while they deserved to be.

The program also included two excellent invited talks: the first one was given by Dimitris Achlioptas (Department of Computer Science, UC Santa Cruz) on “Algorithmic Barriers from Phase Transitions in Graphs” and the second one was given by Erik D. Demaine (MIT Computer Science and Artificial Intelligence Laboratory) on “Algorithmic Graph Minors and Bidimensionality.” This volume contains the abstracts of both talks.

I wish to thank *all* those who contributed to the success of WG 2010. While it is impossible to enumerate them all, this includes the authors for submitting high-quality papers, the reviewers and the members of the Program Committee for their detailed work, the speakers for their well-prepared talks, all the participants for their enthusiasm, and the personnel of the hotel “Idi” for the pleasant conference environment and facilities.

I am grateful to all the students of the Department of Mathematics of the National and Kapodistrian University of Athens that helped with the organization. Among people from the Department of Mathematics, University of Crete, I should thank Christos Kourouniotis for his link to the Anogia Academic Village and Mihalis Kolountzakis for his valuable advice. But most of all, I am indebted

to the conference secretary Marina Vassilaki for her professionalism and diligence during the preparation and the management of the conference.

All material of the conference, including photos and videos of the invited talks, can be found at the homepage of WG 2010 (<http://www.math.uoa.gr/wg2010/>). Special thanks to Charalampos Tampakopoulos for his programming, development, and hosting services.

Finally, I should also thank the EasyChair team for the wonderful conference management system.

September 2010

Dimitrios M. Thilikos
Δημήτριος Μ. Θηλυκός

WG 2010



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- WG 1987 H. Göttler, H.J. Schneider – Kloster Banz near Bamberg, Germany
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- WG 1989 M. Nagl – Castle Rolduc, The Netherlands
- WG 1990 R.H. Möhring – Berlin, Germany
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