

Preface

During its 30-year existence, the International Workshop on Graph-Theoretic Concepts in Computer Science has become a distinguished and high-quality computer science event. The workshop aims at uniting theory and practice by demonstrating how graph-theoretic concepts can successfully be applied to various areas of computer science and by exposing new theories emerging from applications. In this way, WG provides a common ground for the exchange of information among people dealing with several graph problems and working in various disciplines. Thereby, the workshop contributes to forming an interdisciplinary research community.

The original idea of the Workshop on Graph-Theoretic Concepts in Computer Science was ingenuity in all theoretical aspects and applications of graph concepts, wherever applied. Within the last ten years, the development has strengthened in particular the topic of structural graph properties in relation to computational complexity. This workshop has become pivotal for the community interested in these areas. An aim specific to the 30th WG was to support the central role of WG in both of the prementioned areas on the one hand and on the other hand to promote its originally broader scope.

The 30th WG was held at the Physikzentrum Bad Honnef, which serves as the main meeting point of the German Physical Society. It offers a secluded setting for research conferences, seminars, and workshops, and has proved to be especially stimulating for fruitful discussions. Talks were given in the new lecture hall with a modern double rear projection, interactive electronic board, and full video conferencing equipment.

The Call for Papers received a lively response, resulting in 66 submissions. The program committee selected 31 papers for publication among a large set of high-quality contributions. In addition, two invited speakers – Derek Corneil and Roger Wattenhofer – enriched the technical program with surveys of selected fields of graph theory and applications.

We would like to thank all those who made the 30th anniversary of the WG workshop series a success: the authors who submitted their work to the workshop, the speakers, the program committee members, and all referees. We are also indebted to Dirk Bongartz, Joachim Kupke, and Walter Unger for the review organization, and to Boris Böhlen, Christian Fuß, and Ulrike Ranger for the local organization.

Special thanks go to the sponsoring institutions: the Deutsche Forschungsgemeinschaft, Bonn, proRWTH – Freunde und Förderer der RWTH Aachen e.V., the rectorate of RWTH Aachen University, and the Swiss Federal Institute of Technology, Zürich.

September 2004

Juraj Hromkovič
Manfred Nagl
Bernhard Westfechtel

The 30-Year Tradition of WG

1975	U. Pape – Berlin
1976	H. Noltemeier – Göttingen
1977	J. Mühlbacher – Linz
1978	M. Nagl, H.J. Schneider – Schloß Feuerstein, near Erlangen
1979	U. Pape – Berlin
1980	H. Noltemeier – Bad Honnef
1981	J. Mühlbacher – Linz
1982	H.J. Schneider, H. Göttler – Neunkirchen, near Erlangen
1983	M. Nagl, J. Perl – Haus Ohrbeck, near Osnabrück
1984	U. Pape – Berlin
1985	H. Noltemeier – Schloß Schwanenberg, near Würzburg
1986	G. Tinhofer, G. Schmidt – Stift Bernreid, near München
1987	H. Göttler, H.J. Schneider – Schloß Banz, near Bamberg
1988	J. van Leeuwen – Amsterdam
1989	M. Nagl – Schloß Rolduc, near Aachen
1990	R.H. Möhring – Johannesstift Berlin
1991	G. Schmidt, R. Berghammer – Richterheim Fischbackau, München
1992	E.W. Mayr – Wilhelm-Kempf-Haus, Wiesbaden-Naurod
1993	J. van Leeuwen – Sports Center Papendal, near Utrecht
1994	G. Tinhofer, E.W. Mayr, G. Schmidt – Herrsching, near München
1995	M. Nagl – Haus Eich, Aachen
1996	G. Ausiello, A. Marchetti-Spaccamela – Cadenabbia
1997	R.H. Möhring – Bildungszentrum am Müggelsee, Berlin
1998	J. Hromkovič, O. Sýkora – Castle Smolenice, near Bratislava
1999	P. Widmayer – Centro Stefano Franscini, Monte Verità, Ascona
2000	D. Wagner – Waldhaus Jacob, Konstanz
2001	A. Brandstädt – Boltenhagen, near Rostock
2002	L. Kučera – Český Krumlov
2003	H.L. Bodlaender – Mennorode, Elspeet, near Utrecht
2004	J. Hromkovič, M. Nagl – Bad Honnef

Program Committee

Hans Bodlaender	Utrecht University, The Netherlands
Andreas Brandstädt	Universität Rostock, Germany
Michael Fellows	University of Newcastle, Australia
Fedor Fomin	University of Bergen, Norway
Michel Habib	LIRMM Montpellier, France
Juraj Hromkovič	ETH Zürich, Switzerland, Co-chair
Michael Kaufmann	Universität Tübingen, Germany
Luděk Kučera	Charles University, Prague, Czech Republic
Alberto Marchetti-Spaccamela	Università di Roma, Italy
Ernst Mayr	TU München, Germany
Rolf Möhring	TU Berlin, Germany
Manfred Nagl	RWTH Aachen, Germany, Co-chair
Hartmut Noltemeier	Universität Würzburg, Germany
David Peleg	Weizmann Institute, Rehovot, Israel
Ondrej Šýkora	Loughborough University, UK
Gottfried Tinhofer	TU München, Germany
Dorothea Wagner	Universität Karlsruhe, Germany
Bernhard Westfechtel	RWTH Aachen, Germany
Peter Widmayer	ETH Zürich, Switzerland

Additional Reviewers

Michael Baur	Thomas Bayer	Luca Becchetti
Marc Benkert	Dirk Bongartz	Ulrik Brandes
Hajo J. Broersma	Hans-Joachim Böckenbauer	Jana Chlebikova
Olivier Cogan	Amin Coja-Oghlan	Derek Corneil
Sabine Cornelsen	Xiaotie Deng	Stefan Dobrev
Feodor F. Dragan	Stefan Eckhardt	Thomas Erlebach
Jens Ernst	Hazel Everett	Guillaume Fertin
Daniel Fleischer	Michael Gatto	Rodolphe Giroudeau
Jan Griesch	Alexander Hall	Toru Hasunuma
Pinar Heggernes	Klaus Holzappel	Han Hoogeveen
Christian Knauer	Sven Kosub	Jan Kratochvil
Dieter Kratsch	Ekkehard Köhler	Van Bang Le
Nina Lehmann	Christian Liebchen	Marco Lübbecke
Edita Máčajová	Moritz Maaß	Steffen Mecke
Martin Nehéz	Rolf Niedermeier	Naomi Nishimura
Marc Nunkesser	Christophe Paul	Leon Peeters
Stefan Pfitzinger	André Raspaud	Ulrich Rührmair
Thomas Schank	Heiko Schilling	Etienne Schramm
Frank Schulz	Martin Škoviera	Ines Spence
Jeremy Spinrad	Ladislav Stacho	Daniel Stefankovic
Sebastian Stiller	Ioan Todinca	Hanjo Täubig
Peter Ullrich	Walter Unger	Imrich Vrtó
Silke Wagner	Mirjam Wattenhofer	Birgitta Weber
Sebastian Wernicke	Thomas Willhalm	Mark S. Withall
Alexander Wolff		