Preface

The 26th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2000) was held at Waldhaus Jakob, in Konstanz, Germany, on 15–17 June 2000. It was organized by the Algorithms and Data Structures Group of the Department of Computer and Information Science, University of Konstanz, and sponsored by Deutsche Forschungsgemeinschaft (DFG) and Universitätsgesellschaft Konstanz.

The workshop aims at uniting theory and practice by demonstrating how graph-theoretic concepts can be applied to various areas in computer science, or by extracting new problems from applications. The goal is to present recent research results and to identify and explore directions for future research. The workshop looks back on a remarkable tradition of more than a quarter of a century. Previous Workshops have been organized in various places in Europe, and submissions come from all over the world.

This year, 57 attendees from 13 different countries gathered in the relaxing atmosphere of Lake Constance, also known as the Bodensee. Out of 51 submissions, the program committee carefully selected 26 papers for presentation at the workshop. This selection reflects current research directions, among them graph and network algorithms and their complexity, algorithms for special graph classes, communication networks, and distributed algorithms. The present volume contains these papers together with the survey presented in an invited lecture by Ingo Wegener (University of Dortmund) and an extended abstract of the invited lecture given by Emo Welzl (ETH Zürich).

It is my pleasure to thank all the people whose contributions made WG 2000 a successful event: the authors of papers for submitting their work and presenting accepted papers at the workshop; the invited speakers for their remarkable lectures; all reviewers for their careful reports; the members of the program committee for their timely evaluations and intensive discussion during the selection process, and in particular Peter Widmayer for coming to Konstanz for the final discussion; the DFG, the Universitätsgesellschaft Konstanz, and Springer-Verlag for financial support; the Friedrich-Naumann-Stiftung for funding the organization of the workshop at Waldhaus Jakob and Andrea Stern for supporting us during the workshop.

Special thanks go to Sabine Cornelsen, Dagmar Handke, Annegret Liebers, Barbara Lüthke, and Thomas Willhalm. They were responsible for the excellent preparation and perfect organization of the workshop. Furthermore, I would like to express my gratitude to Ulrik Brandes. While I had only to make decisions about insignificant details, he had "a finger in every pie," including the organization of the workshop, the electronic submission and discussion, and the preparation of this volume.

The Tradition of WG

Hosts – Location

- 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 Bernried, 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 Fischbachau, 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 Smolenice-Castle, near Bratislava
- 1999 P. Widmayer Centro Stefano Franscini, Monte Verità, Ascona
- 2000 D. Wagner Waldhaus Jakob, Konstanz

Program Committee

Hans Bodlaender Utrecht University, The Netherlands
Andreas Brandstädt University of Rostock, Germany
Michel Habib LIRMM Montpellier, France
Juraj Hromkovič RWTH Aachen, Germany
Michel Mandreauer Green Germany

Michael Kaufmann University of Tübingen, Germany

Luděk Kučera Charles University, Prague, Czech Republic Alberto Marchetti-Spaccamela Università di Roma "La Sapienzia," Italy

Ernst W. Mayr
Rolf H. Möhring
TU München, Germany
TU Berlin, Germany
Manfred Nagl
RWTH Aachen, Germany

Hartmut Noltemeier University of Würzburg, Germany

Ondrej Sýkora Loughborough University, United Kingdom

Gottfried Tinhofer TU München, Germany

Dorothea Wagner University of Konstanz, Germany (chair)

Peter Widmayer ETH Zürich, Switzerland Christos Zaroliagis University of Patras, Greece

Additional Reviewers

Luca Becchetti Yubao Guo Thomas Schickinger Sergei Bezrukov Dagmar Handke Konrad Schlude Hans-J. Boeckenhauer Arne Hoffmann Sebastian Seibert Jean-Paul Bordat Klaus Jansen Jop Sibeyn Vincent Bouchitté Ekkehard Köhler Martin Skutella Ladislav Stacho Ulrik Brandes Ralf Klasing Bogdan Chlebus Ton Kloks Yannis C. Stamatiou Mark Cieliebak Dieter Kratsch Elias C. Stavropoulos Andrea Clementi László A. Székely Van Bang Le Sabine Cornelsen Annegret Liebers Wolfgang Thomas Peter Damaschke Eberhard Triesch Zsuzsanna Lipták Miriam Di Ianni Haiko Müller Marc Uetz Feodor F. Dragan Michael Naatz Walter Unger Jürgen Ebert Gabriele Never Marián Vajteršic Paylos Efraimidis Ulrich Quernheim Imrich Vrťo Stephan Eidenbenz Dieter Rautenbach Karsten Weihe Jens Ernst Mark Scharbrodt Thomas Willhalm

Sponsoring Institutions

Deutsche Forschungsgemeinschaft (DFG) Universitätsgesellschaft Konstanz