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Ulrik Brandes Thomas Erlebach (Eds.)

Network Analysis

Methodological Foundations



Volume Editors

Ulrik Brandes
University of Konstanz
Department of Computer and Information Science
Box D 67, 78457 Konstanz, Germany
E-mail: ulrik.brandes@uni-konstanz.de

Thomas Erlebach University of Leicester Department of Computer Science University Road, Leicester, LE1 7RH, U.K. E-mail: t.erlebach@mcs.le.ac.uk

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Preface

The present book is the outcome of a seminar organized by the editors, sponsored by the Gesellschaft für Informatik e.V. (GI) and held in Dagstuhl, 13–16 April 2004.

GI-Dagstuhl-Seminars are organized on current topics in computer science that are not yet well covered in textbooks. Most importantly, this gives young researchers an opportunity to become actively involved in such topics, and to produce a book that can provide an introduction for others as well.

The participants of this seminar were assigned subtopics on which they did half a year of research prior to the meeting. After a week of presentations and discussion at Schloss Dagstuhl, slightly more than another half-year was spent on writing the chapters. These were cross-reviewed internally and blind-reviewed by external experts. Since we anticipate that readers will come from various disciplines, we would like to emphasize that it is customary in our field to order authors alphabetically.

The intended audience consists of everyone interested in formal aspects of network analysis, though a background in computer science on, roughly, the undergraduate level is assumed. No prior knowledge about network analysis is required. Ideally, this book will be used as an introduction to the field, a reference and a basis for graduate-level courses in applied graph theory.

First and foremost, we would like to thank all participants of the seminar and thus the authors of this book. We were blessed with a focused and determined group of people that worked professionally throughout. We are grateful to the GI and Schloss Dagstuhl for granting us the opportunity to organize the seminar, and we are happy to acknowledge that we were actually talked into doing so by Dorothea Wagner who was then chairing the GI-Beirat der Universitätsprofessor(inn)en. We received much appreciated chapter reviews from Vladimir Batagelj, Stephen P. Borgatti, Carter Butts, Petros Drineas, Robert Elsässer, Martin G. Everett, Ove Frank, Seokhee Hong, David Hunter, Sven O. Krumke, Ulrich Meyer, Haiko Müller, Philippa Pattison and Dieter Rautenbach. We thank Barny Martin for proof-reading several chapters and Daniel Fleischer, Martin Hoefer and Christian Pich for preparing the index.

December 2004 Ulrik Brandes
Thomas Erlebach

List of Contributors

Andreas Baltz

Mathematisches Seminar Christian-Albrechts-Platz 4 University of Kiel 24118 Kiel, Germany

Nadine Baumann

Department of Mathematics University of Dortmund 44221 Dortmund, Germany

Michael Baur

Faculty of Informatics University of Karlsruhe Box D 6980 76128 Karlsruhe, Germany

Marc Benkert

Faculty of Informatics University of Karlsruhe Box D 6980 76128 Karlsruhe, Germany

Ulrik Brandes

Computer & Information Science University of Konstanz Box D 67 78457 Konstanz, Germany

Michael Brinkmeier

Automation & Computer Science Technical University of Ilmenau 98684 Ilmenau, Germany

Thomas Erlebach

Department of Computer Science University of Leicester University Road Leicester LE1 7RH, U.K.

Marco Gaertler

Faculty of Informatics University of Karlsruhe Box D 6980 76128 Karlsruhe, Germany

Riko Jacob

Theoretical Computer Science Swiss Federal Institute of Technology Zürich 8092 Zürich, Switzerland

Frank Kammer

Theoretical Computer Science Faculty of Informatics University of Augsburg 86135 Augsburg, Germany

Gunnar W. Klau

Computer Graphics & Algorithms Vienna University of Technology 1040 Vienna, Austria

Lasse Kliemann

Mathematisches Seminar Christian-Albrechts-Platz 4 University of Kiel 24118 Kiel, Germany

Dirk Koschützki

IPK Gatersleben Corrensstraße 3 06466 Gatersleben, Germany

Sven Kosub

Department of Computer Science Technische Universität München Boltzmannstraße 3 D-85748 Garching, Germany

Katharina A. Lehmann

Wilhelm-Schickard-Institut für Informatik Universität Tübingen Sand 14, C108 72076 Tübingen, Germany

Jürgen Lerner

Computer & Information Science University of Konstanz Box D 67 78457 Konstanz, Germany

Marc Nunkesser

Theoretical Computer Science Swiss Federal Institute of Technology Zürich 8092 Zürich, Switzerland

Leon Peeters

Theoretical Computer Science Swiss Federal Institute of Technology Zürich 8092 Zürich, Switzerland

Stefan Richter

Theoretical Computer Science RWTH Aachen Ahornstraße 55 52056 aachen, Germany

Daniel Sawitzki

Computer Science 2 University of Dortmund 44221 Dortmund, Germany

Thomas Schank

Faculty of Informatics University of Karlsruhe Box D 6980 76128 Karlsruhe, Germany

Sebastian Stiller

Institute of Mathematics Technische Universität Berlin 10623 Berlin, Germany

Hanjo Täubig

Department of Computer Science Technische Universität München Boltzmannstraße 3 85748 Garching, Germany

Dagmar Tenfelde-Podehl

Department of Mathematics Technische Universität Kaiserslautern 67653 Kaiserslautern, Germany

René Weiskircher

Computer Graphics & Algorithms Vienna University of Technology 1040 Vienna, Austria

Oliver Zlotowski

Algorithms and Data Structures Universität Trier 54296 Trier, Germany

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