

PREFACE

This special volume contains the most important papers presented at the “Conference on Graph Theory” held at Elgersburg (Thuringia, Germany) 8–12, May 2000, which was dedicated to Hanjo Walther on his sixtieth birthday.

The conference was prepared by the mathematical Institutes of the Technical Universities of Ilmenau and Freiberg. It continues a series of international meetings on graph theory and its applications of a similar character, organized by graph theorists from Ilmenau and held at places with a beautiful scenery in the Thuringian Forest, since 1967: Manebach (1967), Oberhof (1977), Eyba (1984), Eisenach (1990), Elgersburg (1996) and Heyda (1998).

About 60 participants formed the audience of 42 lectures and talks on graph theoretical topics of current interests ranging from pure structural analysis (graph coloring, cycle structure, Ramsey numbers, ...) to different fields of applications, e.g. chemistry, planning frequencies.

Hansjoachim Walther was born in 1939 in Pomerania, a state of the pre-war eastern parts of Germany. Becoming a war refugee in 1945, his family finally settled in Zeitz. There he received his Abitur diploma and subsequently entered a vocational school, learning the profession of a toolmaker. From 1959 until 1964 Hansjoachim Walther went to college in Dresden at the Technische Hochschule, now Technische Universität, and majored in mathematics. He mostly studied questions of stochastics and later he considered isoperimetric problems. Since 1964 he is a member of the Technische Universität Ilmenau, where he was employed first as assistant while he worked on his doctorate. Later he became assistant professor and since 1986 serves as professor for discrete mathematics.

In 1974 he published the first ever monograph on “Kreise in Graphen” in cooperation with H.-J. Voss; several textbooks on applications of graph theory were to follow.

When the Berlin wall tumbled (1989/90) Hansjoachim Walther became a member of the “Volkskammer”, after unification a member of the “Bundestag” and finally for some months he served under then-chancellor

H. Kohl as “Bundesminister für besondere Aufgaben”. From 1992 until 2001 he was elected “Dean of the School for Mathematics and Sciences”.

The organizers T. Böhme, J. Harant, E. Hexel, P. John, I. Schiermeyer, M. Sonntag, M. Stiebitz, and M. Voigt thank the attendees for their participation, the authors for their contributions, the referees for their careful work, Barbara Hamann and Ute Leithold for their unvaluable assistance, and the following institutions for their financial support: Technische Universität Ilmenau, Technische Universität Bergakademie Freiberg and Deutsche Forschungsgemeinschaft. In particular, we are much indebted to Mieczysław Borowiecki, Editor-in-Chief of *Discussiones Mathematicae Graph Theory*, for enabling this issue to appear, and Danuta Michalak for her permanent help and competent advice.

Jochen Harant

Margit Voigt

Institut für Mathematik, Technische Universität Ilmenau

Ingo Schiermeyer

Institut für Theoretische Mathematik, Technische Universität

Bergakademie Freiberg