Proceedings of the International Conference on

Semigroups, Acts and Categories with Applications to Graphs

to celebrate the 65th birthdays of Mati Kilp and Ulrich Knauer

University of Tartu, June 27–30, 2007

Edited by Sydney Bulman-Fleming, Roland Kaschek, Valdis Laan

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TABLE OF CONTENTS

Foreword	Ę
Participants	6

FOREWORD

The Conference on Semigroups, Acts and Categories, with Applications to Graphs took place in the Faculty of Mathematics and Computer Science, University of Tartu, from June 27 to June 30, 2007. As well as bringing together scholars working in the subject areas listed in the conference title, giving them an opportunity to present and discuss current research with each other in a friendly and intimate setting, an equally important purpose of the conference was to pay tribute to Professors Mati Kilp and Ulrich Knauer on the occasion of their 65th birthdays for the inspiring leadership they have shown and the major contributions they have made in these areas.

The main speakers at the conference were Victoria Gould (University of York, UK), Mark Lawson (Heriot-Watt University, Edinburgh, UK) and Aleš Pultr (Charles University, Prague, Czech Republic). There were 38 conference participants altogether, ranging from beginning graduate students to seasoned researchers, from 14 different countries, and 30 talks were presented. The 14 papers included in these *Proceedings* are generally based on the talks given at the conference, and include both survey articles and reports on recent new research. In reviewing the articles, a blind refereeing process was employed, and the conference organizers listed below acted as editors.

In addition to the academic sessions, conference participants enjoyed a guided walking tour of Tartu, a bus trip to the resort town of Pärnu (on the Baltic Sea), and a wonderful conference dinner in the Museum of Tartu University History. At the latter event, many individuals offered warm and often moving reminiscences of their association with Mati and Ulrich and their families over the years.

The organizers would like to thank the sponsors of this highly successful conference, namely, the Estonian Mathematical Society, the Faculty of Mathematics and Computer Science, University of Tartu, the Institute of Mathematics of Carl von Ossietzky, Universität Oldenburg (Germany), and Wilfrid Laurier University (Canada). We hope that these Proceedings will serve to introduce readers to several vibrant (and perhaps not yet quite mainstream) areas of pure and applied mathematics that are represented here.

Tartu, July 2008

Syd Bulman-Fleming Roland Kaschek Valdis Laan

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