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Dexter Kozen
Cornell University
Department of Computer Science
Ithaca, NY 14853-7501, USA
E-mail: kozen@cs.cornell.edu

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Preface

This volume contains the proceedings of MPC 2004, the Seventh International Conference on the Mathematics of Program Construction. This series of conferences aims to promote the development of mathematical principles and techniques that are demonstrably useful in the process of constructing computer programs, whether implemented in hardware or software. The focus is on techniques that combine precision with conciseness, enabling programs to be constructed by formal calculation. Within this theme, the scope of the series is very diverse, including programming methodology, program specification and transformation, programming paradigms, programming calculi, and programming language semantics.

The quality of the papers submitted to the conference was in general very high, and the number of submissions was comparable to that for the previous conference. Each paper was refereed by at least four, and often more, committee members.

This volume contains 19 papers selected for presentation by the program committee from 37 submissions, as well as the abstract of one invited talk: *Extended Static Checking for Java* by Greg Nelson, Imaging Systems Department, HP Labs, Palo Alto, California.

The conference took place in Stirling, Scotland. The previous six conferences were held in 1989 in Twente, The Netherlands; in 1992 in Oxford, UK; in 1995 in Kloster Irsee, Germany; in 1998 in Marstrand near Göteborg, Sweden; in 2000 in Ponte de Lima, Portugal; and in 2002 in Dagstuhl, Germany. The proceedings of these conferences were published as LNCS 375, 669, 947, 1422, 1837, and 2386, respectively.

Three other international events were co-located with the conference: the Tenth International Conference on Algebraic Methodology And Software Technology (AMAST 2004), the Sixth AMAST Workshop on Real-Time Systems (ARTS 2004), and the Fourth International Workshop on Constructive Methods for Parallel Programming (CMPP 2004). We thank the organizers of these events for their interest in sharing the atmosphere of the conference.

May 2004

Dexter Kozen

Acknowledgments

We are grateful to the members of the program committee and their referees for their care and diligence in reviewing the submitted papers. We are also grateful to the sponsoring institutions and to the FACS Specialist Group. Finally, we would like to extend a special thanks to Kelly Patwell for all her hard work with the organization of the conference.

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Cornell University
University of Stirling
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External Referees

All submitted papers were carefully reviewed by members of the program committee and the following external referees, who produced extensive review reports that were transmitted to the authors. We apologize for any omissions or inaccuracies.

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Christoph Herrmann	Bruno Oliveira	Paolo Zuliani

Best Paper Award

Modelling Nondeterminism

Clare E. Martin, Sharon A. Curtis, and Ingrid Rewitzky

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