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Tobias Nipkow
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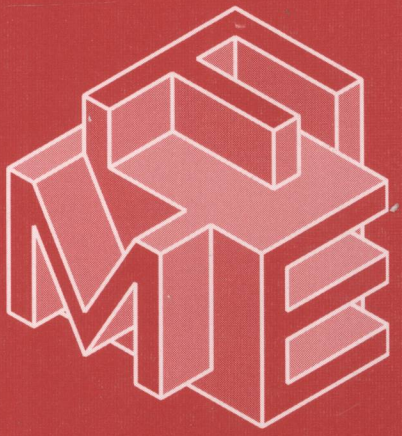
FM 2006: Formal Methods

14th International Symposium on Formal Methods
Hamilton, Canada, August 2006
Proceedings



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Preface

This volume contains the proceedings of Formal Methods 2006, the 14th International Symposium on Formal Methods, held at McMaster University, Hamilton, Canada, during August 21-27, 2006. Formal Methods Europe (FME, www.fmeurope.org) is an independent association which aims to stimulate the use of, and research on, formal methods for system development. The first symposium in this series was VDM Europe in 1987. The scope of the symposium has grown since then, encompassing all aspects of software and hardware which are amenable to formal analysis. As in the previous years, this symposium brings together researchers, tool developers, vendors and users.

We received 145 submissions from 31 countries, making it a truly international event. Each submission was carefully refereed by at least three reviewers. The Program Committee selected 36 papers for presentation at the symposium, after an intensive, in-depth discussion. We would like to thank all the Program Committee members and the referees for their excellent and efficient work.

Apart from the regular contributions, there were five invited talks for the general symposium (Ernie Cohen, Nicholas Griffin, Thomas A. Henzinger, Peter Lindsay and George Necula); the contribution of Henzinger (with Sifakis as a co-author) and an abstract from Cohen are included in this volume.

Nicholas Griffin gave a general and informal talk about Russell's work in logic and the foundations of mathematics in the early years of the twentieth century. It focussed on the philosophical views that underlay Russell's attempts to solve the Russell paradox (and several others) which culminated in the ramified theory of types.

The FM 2006 symposium was planned to include four workshops and ten tutorials. Additionally, there was a Doctoral Symposium which included presentations by doctoral students, and a Poster and Tool Exhibition.

An Industry Day was organized by the Formal Techniques Industrial Association (ForTIA) alongside the main symposium. This was directly related to the main theme of the symposium: the use of well-founded formal methods in the industrial practice of software design, development and maintenance. The theme of the Industry Day in this symposium was "Formal Methods for Security and Trust in Industrial Applications." There were eight invited talks for Industry Day (Randolph Johnson, Jan Jürjens, Scott A. Lintelman, Dusko Pavlovic, Werner Stephan, Michael Waidner, Jim Woodcock and David von Oheimb); abbreviated versions of some of the talks are included in this volume.

The electronic submission, refereeing and Program Committee discussions would not have been possible without support of the EasyChair system, developed by Andrei Voronkov at the University of Manchester, UK. In addition to developing a system of great flexibility, Andrei was available for help and advice throughout; our heart-felt thanks to him. Our thanks to Springer, and,

particularly, Ursula Barth, Anna Kramer and Frank Holzwarth, for help with preparation of this volume.

August 2006

Jayadev Misra
Tobias Nipkow
Emil Sekerinski

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We are grateful to the Computing and Software Center at McMaster University, Hamilton, Canada and Formal Methods Europe for organizing FM 2006. Our special thanks to the faculty, students and staff of McMaster University who volunteered their time in the Organizing Committee.

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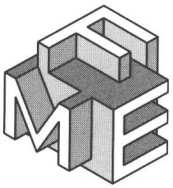

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