

Preface

This volume contains the proceedings of AMAST 2002, the 9th International Conference on Algebraic Methodology and Software Technology, held during September 9–13, 2002, in Saint-Gilles-les-Bains, Réunion Island, France. The major goal of the AMAST conferences is to promote research that may lead to setting software technology on a firm mathematical basis. This goal is achieved through a large international cooperation with contributions from both academia and industry. Developing a software technology on a mathematical basis produces software that is: (a) correct, and the correctness can be proved mathematically, (b) safe, so that it can be used in the implementation of critical systems, (c) portable, i.e., independent of computing platforms and language generations, (d) evolutionary, i.e., it is self-adaptable and evolves with the problem domain.

All previous AMAST conferences, which were held in Iowa City (1989, 1991), Twente (1993), Montreal (1995), Munich (1996), Sydney (1997), Manaus (1999), and Iowa City (2000), made contributions to the AMAST goals by reporting and disseminating academic and industrial achievements within the AMAST area of interest. During these meetings, AMAST attracted an international following among researchers and practitioners interested in software technology, programming methodology, and their algebraic, and logical foundations.

There were 59 submissions of overall high quality, authored by researchers from countries including Algeria, Argentina, Australia, Belgium, Brazil, Canada, China, Denmark, France, Germany, India, Italy, Japan, Korea, New Zealand, Poland, Portugal, Russia, Spain, Sweden, Switzerland, The Netherlands, the USA, and UK. All submissions were thoroughly evaluated, and an electronic program committee meeting was held through the Internet. The program committee selected 26 regular papers plus 2 system descriptions. This volume also includes full papers of six invited lectures given by Gilles Barthe, José Fiadeiro, Dale Miller, Peter Mosses, Don Sannella, and Igor Walukiewicz.

We warmly thank the members of the program committee and all the referees for their care and time in reviewing and selecting the submitted papers, Teodor Knapik for the practical organization of the conference, and all the institutions that supported AMAST 2002: Conseil Régional de la Réunion, Conseil Général de la Réunion, Conseil Scientifique de l'Université de la Réunion, and Faculté des Sciences et Technologies de l'Université de la Réunion.

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