Preface

This volume contains the proceedings of FroCoS 2000, the 3rd International Workshop on Frontiers of Combining Systems, held March 22–24, 2000, in Nancy, France. Like its predecessors organized in Munich (1996) and in Amsterdam (1998), FroCoS 2000 is intended to offer a common forum for research activities related to the combination and the integration of systems in the areas of logic, automated deduction, constraint solving, declarative programming, and artificial intelligence.

There were 31 submissions of overall high quality, authored by researchers from countries including Australia, Brasil, Belgium, Chili, France, Germany, Japan, Ireland, Italy, Portugal, Spain, Switzerland, The Netherlands, the United Kingdom, and the United States of America. All submissions were thoroughly evaluated on the basis of at least three referee reports, and an electronic program committee meeting was held through the Internet. The program committee selected 14 research contributions. The topics covered by the selected papers include: combination of logics; combination of constraint solving techniques, combination of decision procedures; modular properties for theorem proving; combination of deduction systems and computer algebra; integration of decision procedures and other solving processes into constraint programming and deduction systems.

We welcomed five invited lectures by Alexander Bockmayr on "Combining Logic and Optimization in Cutting Plane Theory", Gilles Dowek on "Axioms vs. Rewrite Rules: From Completeness to Cut Elimination", Klaus Schulz on "Why Combined Decision Problems Are Often Intractable", Tomas Uribe on "Combinations of Theorem Proving and Model Checking", and Richard Zippel on "Program Composition Techniques for Numerical PDE Codes". Full papers of these lectures, except the last one, are also included in this volume.

Many people and institutions have contributed to the realization of this conference. We would like to thank the members of the program committee and all the referees for their care and time in reviewing and selecting the submitted papers; the members of the organizing committee for their help in the practical organization of the conference; and all institutions that supported FroCoS 2000: CNRS, Communauté Urbaine du Grand Nancy, Conseil Général de Meurthe et Moselle, Conseil Régional de Lorraine, France Telecom CNET, GDR ALP, INPL, INRIA, LORIA, Université Henri-Poincaré–Nancy 1, and Université Nancy 2.

February 2000

Hélène Kirchner Christophe Ringeissen

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