#### **Preface**

The European Conference on Logics in AI provides a major biennial forum for the discussion of logic-oriented approaches to artificial intelligence. Following previous workshops held in France (1988), The Netherlands (1990), Germany (1992), England (1994), Portugal (1996), Germany (1998), and Spain (2000) the eighth conference was in Cosenza, Italy, September 23–26, 2002. The international level and the overall technical quality of this event is now well established. As a consequence, the Program Committee wished to explicitly mark JELIA 2002 as a milestone by promoting the event from a "Workshop" to a "Conference".

The aim was to bring together active researchers interested in all aspects concerning the use of logics in artificial intelligence to discuss current research, results, problems, and applications of both theoretical and practical nature. JELIA strived to foster links and facilitate cross-fertilization of ideas among researchers from various disciplines, among researchers from academia, industry, and government, and between theoreticians and practitioners.

The technical program of JELIA 2002 comprised three invited talks that were given by Georg Gottlob, Michael Gelfond, and Moshe Y. Vardi and 41 refereed contributions selected by the Program Committee amongst more than 100 submitted papers. As a part of the technical program, the conference featured a special session consisting of 11 system presentations. Finally, the program included three tutorials by V.S. Subrahamanian, Dino Pedreschi and Fosca Giannotti, and Gerald Pfeifer. Technical papers presented at the conference dealt with the following topics: abduction, active and deductive systems, applications of logicbased systems, automated reasoning, belief revision and updates, common-sense reasoning, computational complexity in AI, constraint satisfaction, description logics, hybrid reasoning systems, inductive reasoning and data mining, knowledge representation, logic based AI systems, logic based expert systems, logic based planning and diagnosis, logic databases, logic programming, logics and expressiveness, logics in machine learning, model checking, multi-agent systems, nonmonotonic reasoning, ontologies, semantic web, theorem proving, and uncertain and probabilistic reasoning.

We would like to thank all authors who submitted papers and all conference participants. We are grateful to the members of the program committee and the external referees for their thorough efforts in reviewing submitted contributions with expertise and patience. A special thanks is due to the University of Calabria Organizing Committee which made this event possible.

September 2002

Sergio Flesca Sergio Greco Nicola Leone Giovambattista Ianni

# Organization

JELIA 2002 was organized by the Department of Mathematics and by the Department of Electronics, Computer Science, and Systems of Università della Calabria (Italy).

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