

# Preface

This volume contains the papers from LOPSTR 2001, the 11th International Workshop on Logic-based Program Synthesis and Transformation. Topics of interest to LOPSTR cover all aspects of logic-based program development and, in particular, specification, synthesis, verification, transformation, specialization, analysis, optimization, composition, reuse, component-based software development, and software architectures.

LOPSTR 2001 took place in the Coral Beach Hotel in Paphos (Cyprus) from November 28–30, 2001. Past LOPSTR workshops were held in Manchester, UK (1991, 1992, 1998), Louvain-la-Neuve, Belgium (1993), Pisa, Italy (1994), Arnhem, The Netherlands (1995), Stockholm, Sweden (1996), Leuven, Belgium (1997), Venice, Italy (1999), and London, UK (2000).

LOPSTR 2001 was co-located with the 17th International Conference on Logic Programming (ICLP 2001)<sup>1</sup> and the 7th International Conference on Principles and Practice of Constraint Programming (CP 2001)<sup>2</sup>. The LOPSTR community profited a lot from the scientific discussions, the lectures of the invited speakers, and the various sessions of ICLP and CP.

I would like to express my gratitude to all the authors of the submitted papers and all the attendees for their commitment and cooperation. Among the submitted papers, the Program Committee selected 13 papers for presentation. After the workshop, the authors were asked to submit improved versions of their papers which were then reviewed by the Program Committee. The final versions have been collected in this volume, which also includes the paper by our invited speaker, Natarajan Shankar (Stanford Research Institute, Menlo Park, USA), on the generation of efficient programs from logic.

My warmest thanks also go to all the members of the Program Committee and the additional reviewers for their diligent work and invaluable help. I would like to thank Fabio Fioravanti (IASI-CNR of Rome, Italy), Maurizio Proietti (IASI-CNR of Rome, Italy), and Antonis Kakas (University of Cyprus, Cyprus), who worked with me with great enthusiasm and dedication as members of the Organizing Committee.

The pre-proceedings of LOPSTR 2001 were printed by the IASI Institute of the National Research Council of Rome, Italy, and the Department of Computer Science of the University of Cyprus in Nicosia. I also thank Springer for accepting to publish these final proceedings in the LNCS series. The LOPSTR 2001 home page is: [http://www.iasi.rm.cnr.it/~adp/lopstr01\\_cfp.html](http://www.iasi.rm.cnr.it/~adp/lopstr01_cfp.html).

April 2002

Alberto Pettorossi

---

<sup>1</sup> Codognet, Ph., editor, *Logic Programming — ICLP 2001, Lecture Notes in Computer Science 2237*, Springer-Verlag, 2001.

<sup>2</sup> Walsh, T., editor, *Principles and Practice of Constraint Programming — CP 2001, Lecture Notes in Computer Science 2239*, Springer-Verlag, 2001.

## Program Chair

Alberto Pettorossi                      Università degli Studi di Roma ‘Tor Vergata’, Italy

## Program Committee

David Basin	Albert-Ludwigs-Universität Freiburg, Germany
Antonio Brogi	Università di Pisa, Italy
Maurice Bruynooghe	Katholieke Universiteit Leuven, Belgium
Nicoletta Cocco	Università Ca’ Foscari di Venezia, Italy
Mireille Ducassé	IRISA/INSA, France
Sandro Etalle	Twente University & CWI, The Netherlands
John Gallagher	University of Bristol, UK
Robert Glück	Waseda University, Japan
Michael Hanus	Christian-Albrechts-Universität zu Kiel, Germany
Manuel Hermenegildo	Universidad Politécnica de Madrid, Spain
Patricia Hill	University of Leeds, UK
Kung-Kiu Lau	University of Manchester, UK
Michael Leuschel	University of Southampton, UK
Torben Mogensen	University of Copenhagen, Denmark
Alberto Pettorossi	Università degli Studi di Roma ‘Tor Vergata’, Italy
I. V. Ramakrishnan	State University of New York at Stony Brook, USA
Don Sannella	University of Edinburgh, UK
Zoltan Somogyi	University of Melbourne, Australia

## Additional Referees

José Alferes	Stefan Gruner	Sabina Rossi
Annalisa Bossi	Paul Jackson	Fausto Spoto
Luís Fernando Castro	Francis Klay	Mathieu Turuani
Alessandra Di Pierro	Giridhar Pemmasani	Wim Vanhoof
Yifei Dong	Maurizio Proietti	
Fabio Fioravanti	Germán Puebla	

## Sponsoring Institutions

The Association for Logic Programming  
The COLOG Net  
The International Federation for Computational Logic  
The IASI Institute of CNR (Italy)  
Università degli Studi di Roma ‘Tor Vergata’ (Italy)