

Preface

This volume contains the proceedings of the Joint International Symposium PLILP/ALP '98, which has united the Tenth PLILP (Programming Languages, Implementations, Logics and Programs) and the Seventh ALP (Algebraic and Logic Programming) conferences. This symposium was held in Pisa, Italy, during September 16–18, in cooperation with the Fifth Static Analysis Symposium (SAS '98), chaired by Giorgio Levi, and in conjunction with a number of satellite events.

The previous PLILP meetings took place in Orléans, France (1988), Linköping, Sweden (1990), Passau, Germany (1991), Leuven, Belgium (1992), Tallinn, Estonia (1993), Madrid, Spain (1994), Utrecht, The Netherlands (1995), Aachen, Germany (1996), and Southampton, UK (1997). All proceedings have been published by Springer-Verlag as Lecture Notes in Computer Science, volumes 348, 456, 528, 631, 714, 844, 982, 1140, and 1292, respectively.

The previous ALP meetings took place in Gaussig, Germany (1988), Nancy, France (1990), Volterra, Italy (1992), Madrid, Spain (1994), Aachen, Germany (1996), and Southampton, UK (1997). All proceedings have been published by Springer Verlag as Lecture Notes in Computer Science, volumes 343, 463, 632, 850, 1139, and 1298, respectively.

The PLILP symposia traditionally aim at stimulating research in declarative programming languages, and seek to disseminate insights in the relation between the logics of those languages, implementation techniques, and the use of these languages in constructing real programs. The ALP conferences traditionally promote the exchange of ideas and experiences among researchers from the declarative programming communities. In addition to the standard topics, the 98 Joint Symposium encouraged contributions also from other programming areas, in particular from the concurrent and object-oriented fields.

The program committee met electronically during the second and third week of May, 1998, and selected 26 papers out of 68 submissions (38%). Besides the selected contributions, the scientific program included three invited talks, by Charles Consel (University of Rennes/Irisa, France), Amir Pnueli (Weizmann Institute of Science, Rehovot, Israel), and Scott A. Smolka (SUNY Stony Brook, USA). The last two presentations were shared with SAS '98. In addition, the program included three tutorials, by Andrea Asperti (University of Bologna, Italy), John Hannan (The Pennsylvania State University, USA), and Andrew Pitts (University of Cambridge, UK). This volume contains all the selected papers, and the contributions (either in form of a short abstract or a full paper) of the invited speakers and tutorialists, except for the contribution of Amir Pnueli, which is included in the proceedings of SAS '98.

We would like to thank all those who submitted papers, for their interest in PLILP/ALP '98, the Program Committee members and their referees, for their careful work in the reviewing and the selection process, and the invited speakers and tutorialists, for their contribution to the success of the symposium.

Finally, we would like to express our gratitude to the members of the local committee, for the effort they have invested in organizing this event.

July 1998

Catuscia Palamidessi, Hugh Glaser and Karl Meinke

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Joint events

Chair: Roberto Bagnara

The SAS/PLILP/ALP '98 conference was held in conjunction with the following satellite events:

The Workshop on Principles of Abstract Machines.
Organized by Stephan Diehl and Peter Sestoft.

The 1st International Workshop on Component-based software development in Computational Logic.
Organized by Antonio Brogi and Patricia Hill.

The Second International Workshop on Verification, Model Checking and Abstract Interpretation.
Organized by Annalisa Bossi, Agostino Cortesi, and Francesca Levi.

The ERCIM Working Group on Programming Languages.
Coordinated by Neil Jones.

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