

# Lecture Notes in Computer Science

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# Logic Program Synthesis and Transformation – Meta-Programming in Logic

4th International Workshops  
LOPSTR '94 and META '94  
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## Preface

This volume contains the proceedings of the LOPSTR'94 and META'94 workshops, which were held in Pisa on June 20-21, 1994. The two workshops took place in parallel and were attended by 69 persons coming from 16 countries.

LOPSTR'94 is the Fourth International Workshop on Logic Program Synthesis and Transformation. Previous workshops had taken place in Manchester (1991, 1992) and in Louvain-la-Neuve (1993). This year, 19 submitted papers were selected for presentation in Pisa, among which 15 were accepted for inclusion in these proceedings, after some revisions had been made by the authors. The main topics addressed by the papers are: unfolding/folding, partial deduction, proofs as programs, inductive logic programming, automated program verification, specification and programming methodologies.

META'94 is the Fourth International Workshop on Metaprogramming in Logic. Previous workshops had taken place in Bristol (1988), in Leuven (1990), and in Uppsala (1992). This year, 21 papers were submitted and 11 were accepted for presentation in Pisa and inclusion in the proceedings. The main topics addressed by the papers are: language extensions in support of Meta-logic, semantics of Meta-logic, implementation of Meta-logic features, performance of Meta-logic, and applications of Meta-logic to non-monotonic reasoning, program control, and programming in the large,

In addition to LOPSTR-META regular contributions, two invited speakers gave very insightful and appreciated talks in Pisa: Giorgio Levi on "Abstract debugging of logic programs" (included in this book) and Burton Dreben on "Herbrand's contributions to logic".

We would like to thank all the members of the Program Committees as well as the referees for their thorough job of reviewing.

We also express our gratitude to all the members of the local organizing committee for their help in organizing these successful events.

We gratefully acknowledge the financial support of the Compulog Network of Excellence.

September 1994

Laurent Fribourg, Franco Turini

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