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ALP '97 — HOA '97
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Preface

This volume contains the proceedings of the *Sixth International Conference on Algebraic and Logic Programming* (ALP'97) and the *Third International Workshop on Higher-Order Algebra, Logic and Term Rewriting* (HOA'97), held in Southampton (Great Britain) during September 3–5, 1997. The conference ALP'97 was preceded by meetings in Gaussig (1988), Nancy (1990), Volterra (1992), Madrid (1994), and Aachen (1996). The proceedings of these conferences have been published by Springer-Verlag, as Lecture Notes in Computer Science volumes 343, 463, 632, 850, and 1139, respectively. The workshop HOA'97 was preceded by meetings in Amsterdam (1993) and Paderborn (1995). The proceedings of these workshops have also been published as Lecture Notes in Computer Science volumes 816 and 1074 respectively.

The ALP conference aims at strengthening the connections between algebraic techniques and logic programming. On the one hand, logic programming has been very successful during the last two decades, and many efforts have been made to enhance its expressive power and efficiency, including in particular the emergence of constraint logic programming. On the other hand, concepts such as functions, types, equational theories, and modularity are particularly well handled in an algebraic framework. As during the previous conferences, ALP promotes the cross-fertilizing exchange of ideas and experiences among researchers from the algebraic and logic programming communities.

The HOA workshop aims to provide an overview of current research, and to suggest new research directions, in the area of higher-order methods. These are now widely applied in declarative programming languages, as well as in software and hardware specification and verification. The scope of the workshop includes higher-order aspects of: algebra, logic and model theory, term rewriting, specification and verification languages, computational logic and theorem proving, and also system implementations and case studies.

On this occasion, ALP'97 and HOA'97 were held jointly, allowing contributors and participants to exploit the overlap in these subject areas. ALP'97 and HOA'97 were also held concurrently with the Ninth International Symposium on Programming Languages, Implementations, Logics, and Programs (PLILP'97).

The joint ALP'97/HOA'97 Program Committee met electronically during the final week of May, 1997. There was an email discussion of those papers for which there was a significant disagreement about the judgement. Finally, the combined Program Committees selected 18 papers from 31 submissions.

We would like to thank all the members of the Program Committee and all the referees for their careful work in the reviewing and selection process.

The ALP'97 and HOA'97 conferences were organised in cooperation with the British Computer Society, the Association of Logic Programming, the European Association for Programming Languages and Systems, Compulog Net (the ESPRIT Network of Excellence in Computational Logic), and the European Association for Computer Science Logic (EACSL).

Finally, we express our gratitude to all members of the local Organizing Committee for their help in organizing a successful event.

Aachen
Amsterdam
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June 1997

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