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J. von Wright J. Grundy J. Harrison (Eds.)

# Theorem Proving in Higher Order Logics

9th International Conference, TPHOLs'96
Turku, Finland, August 1996
Proceedings

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# Preface

This volume contains the proceedings of the *The 9th International Conference on Theorem Proving in Higher Order Logics* (TPHOLs'96). The previous meetings in the series were known initially as HOL Users Meetings, and later as Workshops on Higher Order Logic Theorem Proving and its Applications. The new name for the series reflects a broadening in scope of the conferences, which now encompass work related to all aspects of theorem proving in higher order logics, particularly when based on a secure mechanization of logic. As a sign of the broad scope of the conference, these proceedings contain papers describing work using the Alf, Coq, HOL, Isabelle, LAMBDA, LEGO, NuPrl, and PVS theorem provers.

The forty-six papers submitted to TPHOLs'96 were generally of high standard. All submissions were fully refereed, each paper being read by at least three reviewers appointed by the programme committee. Twenty-seven papers were selected for presentation as full research contributions. These are the papers contained in this volume. The conference also continued the tradition of its predecessors of providing an open venue for the discussion and sharing of preliminary results. Thus the programme included an informal poster session where twenty researchers were invited to present their work. The poster papers are available in a supplementary proceedings produced as a General Publication of the Turku Centre for Computer Science (TUCS).

The organizers are pleased that Mike Gordon and Andrzej Trybulec accepted invitations to be guest speakers at the conference. In addition to the two invited lectures, the conference also included two tutorials, by Paul Jackson and Christine Paulin-Mohring.

The conference was sponsored by the Turku Centre for Computer Science, the Research Institute of the Foundation of Åbo Akademi, and the Academy of Finland. Their financial support is gratefully acknowledged. We also want to thank Christel Engblom, Sirpa Nummila, and Gundel Westerholm who assisted in matters of local organization.

August 1996

Joakim von Wright
Jim Grundy
John Harrison

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### Tutorial Speakers:

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