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Theorem Proving in Higher Order Logics

10th International Conference, TPHOLs '97
Murray Hill, NJ, USA, August 19-22, 1997
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Preface

This volume contains the proceedings of the tenth international conference on *Theorem Proving in Higher Order Logics* (TPHOLs97), held at Bell Laboratories, Lucent Technologies, in Murray Hill, New Jersey, USA, during August 19-22, 1997. The previous meetings in this series were known initially as HOL Users Meetings, and later as Workshops on Higher Order Logic Theorem Proving and its Applications. The name Theorem Proving in Higher Order Logics was adopted for the first time last year to reflect a broadening in scope of the conference, which now encompasses work related to all aspects of theorem proving in higher order logics, particularly when based on a secure mechanization of those logics. These proceedings include papers describing work in Coq, HOL, Isabelle, LEGO, and PVS theorem provers.

The thirty-two papers submitted this year were generally of high quality. All submissions were fully refereed, each paper being reviewed by at least three reviewers appointed by the program committee (generally members of the committee themselves). Nineteen papers were selected for presentation as full research contributions. These are the papers appearing in this volume. The conference also continued its tradition of providing an open venue for the discussion and sharing of preliminary results and work in progress. Thus, the program included two informal poster sessions where twelve researchers were invited to present their work.

The organizers were pleased that Professor Robert L. Constable, Professor Deepak Kapur, and Dr. Doron Peled accepted invitations to be guest speakers at the conference. All three invited speakers also very kindly produced a written abstract or extended abstract of their talk for inclusion in these proceedings.

The conference was sponsored by Bell Laboratories, Lucent Technologies, and by the Department of Computer and Information Science of the University of Pennsylvania. We also want to thank Jennifer MacDougall who assisted in matters of local organization.

June 1997

Elsa L. Gunter
Amy Felty

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Deepak Kapur (SUNY - Albany)
Doron Peled (Bell Labs, Lucent)

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