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Theorem Proving in Higher Order Logics

15th International Conference, TPHOLs 2002
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Preface

This volume contains the proceedings of the *15th International Conference on Theorem Proving in Higher Order Logics* (TPHOLs 2002) held on 20–23 August 2002 in Hampton, Virginia, USA. The conference serves as a venue for the presentation of work in theorem proving in higher-order logics, and related areas in deduction, formal specification, software and hardware verification, and other applications.

Each of the 34 papers submitted in the full research category was refereed by at least three reviewers from the program committee or by a reviewer appointed by the program committee. Of these submissions, 20 papers were accepted for presentation at the conference and publication in this volume.

Following a well-established tradition in this conference series, TPHOLs 2002 also offered a venue for the presentation of work in progress. For the work in progress track, short introductory talks were given by researchers, followed by an open poster session for further discussion. Papers accepted for presentation in this track have been published as Conference Proceedings CP NASA-2002-211736.

The organizers would like to thank Ricky Butler and Gérard Huet for gracefully accepting our invitation to give talks at TPHOLs 2002. Ricky Butler was instrumental in the formation of the Formal Methods program at the NASA Langley Research Center and has led the group since its beginnings. The NASA Langley Formal Methods group, under Ricky Butler's guidance, has funded, been involved in, or influenced many formal verification projects in the US over more than two decades. In 1998 Gérard Huet received the prestigious Herbrand Award for his fundamental contributions to term rewriting and theorem proving in higher-order logic, as well as many other key contributions to the field of automated reasoning. He is the originator of the Coq System, under development at INRIA-Rocquencourt. Dr. Huet's current main interest is computational linguistics, however his work continues to influence researchers around the world in a wide spectrum of areas in theoretical computer science, formal methods, and software engineering.

The venue of the TPHOLs conference traditionally changes continent each year in order to maximize the likelihood that researchers from all over the world will attend. Starting in 1993, the proceedings of TPHOLs and its predecessor workshops have been published in the following volumes of the Springer-Verlag *Lecture Notes in Computer Science* series:

1993 (Canada)	780	1998 (Australia)	1479
1994 (Malta)	859	1999 (France)	1690
1995 (USA)	971	2000 (USA)	1869
1996 (Finland)	1125	2001 (UK)	2152
1997 (USA)	1275		

The 2002 conference was organized by a team from NASA Langley Research Center, the ICASE Institute at Langley Research Center, and Concordia University. Financial support came from Intel Corporation. The support of all these organizations is gratefully acknowledged.

August 2002

Víctor A. Carreño
César A. Muñoz

Organization

TPHOLs 2002 is organized by NASA Langley and ICASE in cooperation with Concordia University.

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