

**Empirically Successful Automated Reasoning
in Higher-Order Logic (ESHOL)**

will be held at

**Wexford Hotel, Montego Bay, Jamaica
December 2nd 2005**

<http://www.ags.uni-sb.de/~chris/ESHOL-05/>



The workshop is open for all registered LPAR attendees

(Proceedings in arxiv.org)

This workshop brings together practioners and researchers who are involved in the everyday aspects of logical systems based on higher-order logic. We hope to create a friendly and highly interactive setting for discussions around the following four topics. Implementation and development of proof assistants based on any notion of impredicativity, automated theorem proving tools for higher-order logic reasoning systems, logical framework technology for the representation of proofs in higher-order logic, formal digital libraries for storing, maintaining and querying databases of proofs.

We envision attendees that are interested in fostering the development and visibility of reasoning systems for higher-order logics. We are particularly interested in a discussion on the development of a higher-order version of the TPTP and in comparisons of the practical strengths of automated higher-order reasoning systems.

Additionally, the workshop will include **system demonstrations**.

ESHOL is the successor of the ESCAR and ESFOR workshops held at CADE 2005 and IJCAR 2004.

Timetable

- 09:00-10:00 Invited Talk
Joe Hurd (Oxford):
First Order Proof for Higher Order Logic Theorem Provers (pdf)
- 10:00-10:30 Coffee Break
- 10:30-12:30 Paper Session I (30min each)
Michael Beeson:
Implicit Typing in Lambda Logic (pdf)
Christoph Benzmlleer:
LEO – A Resolution based Higher Order Theorem Prover (pdf)
Christoph Benzmlleer, Volker Sorge, Mateja Jamnik and Manfred Kerber:
Combining Proofs of Higher-Order and First-Order Automated Theorem Provers (pdf)
- 12:30-13:30 Lunch Break
- 13:30-14:30 Invited Talk
Chad Brown (Saarbrücken):
Benchmarks for Higher-Order Automated Reasoning (pdf)
- 14:30-15:30 Paper Session II (30min each, chair: TBA)
Jutta Eusterbrock:
Co-Synthesis of New Complex Selection Algorithms and their Human Comprehensible XML Documentation (pdf)
Alwen Tiu, Gopalan Nadathur and Dale Miller:
Mixing Finite Success and Finite Failure in an Automated Prover (pdf)
- 15:30-16:00 Coffee Break
- 16:00-17:00 System Demonstrations (15min each)
Michael Beeson:
Otter- λ (pdf)
Chad Brown:
TPS (pdf)
Joe Hurd:
Metis (pdf)
Christoph Benzmlleer:
LEO
- 17:00-18:00 Discussion: Higher-Order TPTP – Feasible or Not?
Chair and Panelists: TBA

Organization

Programme Committee

Peter Andrews Carnegie Mellon University, USA
Michael Beeson San Jose State University, USA
Chad Brown Saarland University, Germany
Gilles Dowek École Polytechnique, France
Christoph Kreitz Potsdam University, Germany
Larry Paulson Cambridge University, UK
Frank Pfenning Carnegie Mellon University, USA
Geoff Sutcliffe University of Miami, USA
Volker Sorge University of Birmingham, UK
Freek Wiedijk Nijmegen University, Netherlands

Organizers and PC Chairs

Christoph Benz Müller Saarland University, Germany
John Harrison Intel Corporation, USA
Carsten Schürmann Yale University, USA

If you have any questions about the workshop, please email the organizers

The original CFP can be found [here](#).

This page is also available as pdf.