

## CALL FOR PAPERS

22nd International Conference on

### Theorem Proving in Higher Order Logics (TPHOLS 2009)

17 – 20 August 2009, Munich, Germany

<http://tphols.in.tum.de/>

#### Invited Speakers:

David Basin, *ETH Zurich*  
John Harrison, *Intel*  
Wolfram Schulte, *Microsoft Research*

#### Program Committee:

Thorsten Altenkirch, *Nottingham University*  
David Aspinall, *Edinburgh University*  
Jeremy Avigad, *Carnegie Mellon University*  
Gilles Barthe, *IMDEA*  
Christoph Benzmüller, *Saarland University*  
Peter Dybjer, *Chalmers University*  
Jean-Christophe Filliâtre, *CNRS*  
Georges Gonthier, *Microsoft Research*  
Mike Gordon, *Cambridge University*  
Jim Grundy, *Intel*  
Reiner Hähnle, *Chalmers University*  
Joe Hurd, *Galois*  
Gerwin Klein, *NICTA*  
Xavier Leroy, *INRIA*  
Pete Manolios, *Northeastern University*  
César Muñoz, *National Institute of Aerospace*  
Tobias Nipkow (co-chair), *TU München*  
Michael Norrish, *NICTA*  
Sam Owre, *SRI International*  
Larry Paulson, *Cambridge University*  
Frank Pfenning, *Carnegie Mellon University*  
Randy Pollack, *Edinburgh University*  
Sofïène Tahar, *Concordia University*  
Laurent Théry, *INRIA*  
Christian Urban (co-chair), *TU München*  
Freek Wiedijk, *Radboud University Nijmegen*

#### Important Dates:

Submission:	8 March 2009
Author notification:	4 May 2009
Camera-ready papers due:	5 June 2009
Submission for the emerging trends section:	11 May 2009
Conference:	17 – 20 August 2009

#### Organizers:

Stefan Berghofer  
Tobias Nipkow  
Christian Urban  
Makarius Wenzel

TPHOLS is a series of international conferences that started in 1988. It brings together researchers working in all areas of interactive theorem proving. The conference will be held on 17–20 August 2009 in Munich. As in previous years, the formal proceedings of TPHOLS will appear as a volume of LNCS.

#### Topics

The program committee welcomes submissions on all aspects of theorem proving in higher order logics, on related topics in theorem proving and verification, and on relevant applications. The topics include, but are not limited to, the following:

- Specification and verification of hardware: microprocessors, memory systems, buses, pipelines, etc; formal semantics of hardware design languages; synthesis; formal design flows.
- Specification and verification of software: program verification, refinement, and synthesis for functional, declarative and imperative languages; formal semantics of programming languages; compiler and operating system verification; proof carrying code.
- Industrial application of theorem provers.
- Formalization of mathematical theories.
- Advances in theorem prover technology: proof automation and decision procedures, induction, combination of deductive and algorithmic approaches, incorporation of theorem provers into larger systems, combination of theorem provers with other provers and tools.
- Other topics, including: user interfaces for theorem provers; development and extension of higher order logics.
- Proof Pearls: concise and elegant presentations of interesting examples.

Relevant research involving interactive first-order systems, such as ACL2 and Mizar, is also welcome. All authors are reminded that their work should be presented in a way that users of other systems can understand.

Papers should be no more than 16 pages in length and are to be submitted in PDF format. Submissions must describe original unpublished work not submitted for publication elsewhere. They must conform to the LNCS style preferably using LaTeX2e. The proceedings are to be published as a volume in the Lecture Notes in Computer Science series and will be available to participants at the conference.

Authors of accepted papers are expected to present their paper at the conference.

As has been custom in previous years there will be an *emerging trends section*. Submissions under this section will not be formally refereed, but their content and relevance will be reviewed. Those submissions accepted will be published in a technical report of the TU München, which will also be available at the conference. Authors of accepted papers in this section are expected to present a brief outline of their work at the conference and to prepare a poster for display at the conference venue.