

Sunday, August 17

17:00-19:00

REGISTRATION

WELCOME RECEPTION

Monday, August 18

8:00 – 9:00

REGISTRATION

9:00 – 10:00

KEYNOTE I (Session Chair: Sofiène Tahar)

Mike Gordon. *Twenty Years of Theorem Proving for HOLs*

10:00 – 10:30

COFFEE BREAK

10:30 – 12:00

RESEARCH PAPERS (Session Chair: Tobias Nipkow)

- Lukas Bulwahn, Alexander Krauss, Florian Haftmann, Levent Erkok and John Matthews. *Imperative Functional Programming with Isabelle/HOL*
- Sascha Böhme, Rustan Leino and Burkhart Wolff. *HOL-Boogie --- An Interactive Prover for the Boogie Program-Verifier*
- Holger Gast. *Lightweight Separation*

12:00-14:00

LUNCH

14:00-16:00

RESEARCH PAPERS (Session Chair: Cesar Munoz)

- Jens Brandt and Klaus Schneider. *Formal Reasoning about Causality Analysis*
- David Cock, Gerwin Klein and Thomas Sewell. *Secure Microkernels, State Monads and Scalable Refinement*

Emerging Trends

- Maria Spichkova. **Focus on Isabelle: From Specification to Verification**
- Magnus O. Myreen. **Verification of LISP Interpreters**
- Serguei A. Mokhov, Joey Paquet. **Formally Specifying Operational Semantics and Language Constructs of Forensic Lucid in Higher-Order Intensional Logic**
- Stephane Lescuyer, Sylvain Conchon. **A reflexive formalization of a SAT solver in Coq**
- Harald Hiss. **Checking the Satisfiability of XML-Specifications**
- Thomas Tuerk. **Separation Logic Framework in HOL**

16:00-17:00

COFFEE BREAK + POSTERS

Tuesday, August 19

8:00 – 9:00	TUTORIAL I (Session Chair: Yves Bertot) Konrad Slind. <i>A Brief Overview of HOL4</i>
9:00 – 10:00	TUTORIAL II (Session Chair: Ben Di Vito) Sam Owre. <i>A Brief Overview of PVS</i>
10:00 – 10:30	COFFEE BREAK
10:30 – 12:00	RESEARCH PAPERS (Session Chair: Bukhart Wolff) <ul style="list-style-type: none">• Klaus Aehlig, Florian Haftmann and Tobias Nipkow. <i>A Compiled Implementation of Normalization by Evaluation</i>• Pierre Courtieu, Julien Forest and Xavier Urbain. <i>Certifying a Termination Criterion Based on Graphs, without Graphs</i>• Yves Bertot, Georges Gonthier, Sidi Ould Biha and Ioana Pasca. <i>Canonical Big Operators</i>
12:00-14:00	LUNCH
14:00-16:00	RESEARCH PAPERS (Session Chair: John Matthews) <ul style="list-style-type: none">• Ana Bove and Venanzio Capretta. <i>A Type of Partial Recursive Functions</i>• Daniel Wasserrab and Andreas Lochbihler. <i>Formalizing a Framework for Dynamic Slicing of Program Dependence Graphs in Isabelle/HOL</i> Emerging Trends <ul style="list-style-type: none">• Osman Hasan. Probabilistic Analysis using Theorem Proving• Patrice Chalin, Perry James, George Karabotsos. Using Isabelle/HOL for Static Program Verification in JML4• Ayesha Yasmeen, Elsa L. Gunter. Implementing Secure Broadcast Ambients in Isabelle using Nominal Logic• Amjad Gawanmeh. Theorem Proving based Framework for Verification of Group Key Protocols• Brian Huffman. Reasoning with Powerdomains in Isabelle/HOLCF• Alexander Krauss. Shallow Dependency Pairs
16:00-17:00	COFFEE BREAK + POSTERS

Wednesday, August 20

8:00 – 9:00	<i>TUTORIAL III (Session Chair: Matt Kaufmann)</i> Tobias Nipkow. The Isabelle Framework
9:00 – 10:00	<i>TUTORIAL IV (Session Chair: Jens Brandt)</i> Yves Bertot. A short presentation of Coq
10:00 – 10:30	<i>COFFEE BREAK</i>
10:30 – 12:00	<i>RESEARCH PAPERS (Session Chair: Sam Owre)</i> <ul style="list-style-type: none">• Sayan Mitra and K. Mani Chandy. <i>A Formalized Theory for Verifying Stability and Convergence of Automata in PVS</i>• Polyvios Pratikakis, Jeff Foster, Michael Hicks and Iulian Neamtiu. <i>Formalizing Soundness of Contextual Effects</i>• Matthieu Sozeau and Nicolas Oury. <i>First-Class Type Classes</i>
12:00-14:00	<i>LUNCH</i>
14:00-16:30	<i>Visit to Point-a-Caillère Museum</i>
16:30-18:00	<i>Free time to visit Old Montreal</i>
18:00-23:00	<i>CRUISE + CONFERENCE DINNER</i>

Thursday, August 21

8:00 – 9:00	TUTORIAL V (Session Chair: Peter Homeir) Matt Kaufmann. <i>An ACL2 Tutorial</i>
9:00 – 10:00	KEYNOTE II (Session Chair: Otmane Ait Mohamed) Steve Miller. <i>Will This Be Formal?</i>
10:00 – 10:30	COFFEE BREAK
10:30 – 12:00	RESEARCH PAPERS (Session Chair: Mike Gordon) <ul style="list-style-type: none">• David Lester. <i>Real Number Calculations and Theorem Proving: Validation and Use of an Exact Arithmetic</i>• Russell O'Connor. <i>Certified Exact Transcendental Real Number Computation in Coq</i>• Stefan Berghofer and Christian Urban. <i>Nominal Inversion Principles</i>
12:00-14:00	LUNCH
14:00-15:00	RESEARCH PAPERS (Session Chair: Konrad Slind) <ul style="list-style-type: none">• Hasan Amjad. <i>LCF-style Propositional Simplification With BDDs and SAT Solvers</i>• Laurent Thery. <i>Proof Pearl. Revisiting the Mini-Rubik in Coq</i>
15:00-16:00	BUSINESS MEETING
16:00-16:30	COFFEE BREAK + CLOSING REMARKS
16:30-18:30	<i>Isabelle informal meeting</i>