

Detailed Program

Tuesday March 29

09:00 - Introductions

10:00 - Coffee Break - 45min

10:45 - Presentations - 2 long 4 short

Andrew Appel - short - DeepSpec, CertiCoq, Verified Functional Algorithms

Catalin Hritcu - long - Dependent Types and Multi-Monadic Effects in F*

Matthieu Sozeau - short - Equations: a toolbox for function definitions in Coq

Rustan Leino - long - Automated verification of functional programs

Wouter Swierstra - short - Lazy BDDs

Gabriele Keller - short - A language based approach to system code verification

12:15 - Lunch - 2h15min

14:30 - Breakout sessions

Integrating formal methods tools in the curriculum

Grand Challenges

Hands on Tool Tutorials

15:30 - Cake Break - 1h

16:30 - Presentations - 1 long - 1 short

Reiner Hahnle - long - The Interactive Software Verification System Key

Nobuko Yoshida - short - Scribble and its applications

17:00 - Breakout sessions

Integrating formal methods tools in the curriculum

Grand Challenges

Hands on Tool Tutorials

18:00 - Dinner

20:00 - Socialize with tools

Wednesday March 30

09:00 - Presentations - 2 long 1 short

Andreas Abel - long - Coinduction using copatterns and sized types

Brigitte Pientka - long - Programming Coinductive Proofs Using Observations

Katya Komendantskaya - short - Automated Proving for Type Inference, Constructively

10:00 - Coffee Break - 45min

10:45 - Presentations - 3 long 2 short

David Van Horn - long - Contract Verification and Refutation

Michael Greenberg - short - Verification by Optimization: Two Approaches to Manifest Contracts

Scott Smith - long - Demand-Driven Analysis for Functional Programs

Sam Tobin-Hochstadt - short - Occurrence Typing Modulo Theories

Dominic Orchard - long - From analysis-directed semantics to specifications-in-types

12:15 Lunch - 2h15min

14:30 - Presentations - 1 long 1 short

Richard Eisenberg - long - Dependently typed programming in GHC 8

Amal Ahmed - short - Type-Preserving Compilation of Dependent Types

15:00 Excursion

18:00 Dinner

20:00 Socialize with tools

Thursday March 31

09:00 - Presentations - 2 long 1 short

Naoki Kobayashi - long - Program Verification Based on Higher-Order Model Checking

Martin Lange - short - Ramsey-based methods: size-change termination and satisfiability of temporal logics

Luke Ong - long - Higher-order horn clauses and higher-order model checking

10:00 - Coffee Break - 45min

10:45 - Presentation - 3 long 2 short

Jean-Christophe Filliatre - short - Deductive Verification with Why3

Hiroshi Unno - long - Refinement Caml: A Refinement Type Checking and Inference Tool for OCaml

Deepak Garg - long - Towards a type-theory for relational cost analysis

Niki Vazou - long - LiquidHaskell: Liquid Types for Haskell

Gowtham Kaki - short - Relational Reasoning about Higher-Order Shape Properties

12:15 Lunch - 2h15min

14:30 Breakout sessions

Implementation approaches

User Interaction

Types & Effects

15:30 Cake Break - 1h

16:30 Presentation - 1 long - 1 short

Tachio Terauchi - long - Temporal Verification of Higher-Order Functional Programs

Nadia Polikarpova - short - Program Synthesis from Refinement Types

17:00 Breakout sessions

Implementation approaches

User Interaction

Types & Effects

18:00 Dinner

20:00 Socialize with tools

Friday April 1

09:00 - Presentations - 2 long 1 short

Conor McBride - long - Subtle points

Jan Midtgaard - long - A Static Type Analysis for Lua

Iavor S. Diatchki - short - Type Systems as Proof Strategies

10:00 - Coffee Break - 45min

10:45 - Breakout sessions report

12:15 Lunch - departure