

Monday 16 September

9:00 Invited talk (chair: Tom Schrijvers)

Ilya Sergey: *Monadic Abstract Interpreters*

10:00 Technical Session (chair: Tom Schrijvers)

A Declarative and Bidirectional Model Transformation Approach Based on Graph Co-spans

Yngve Lamo, Florian Mantz, Adrian Rutle, Juan De Lara

10:30 Coffee Break

11:00 Technical Session (chair: Olivier Danvy)

Coq: The world's best macro assembler?

Nick Benton, Andrew Kennedy, Jonas Braband Jensen, Pierre-Evariste Dagand

An Operational Foundation for the Tactic Language of Coq

Wojciech Jedynek, Malgorzata Biernacka, Dariusz Biernacki

Proofs You Can Believe In: Proving Equivalences Between Prolog Semantics in Coq

Jael Kriener, Andy King, Sandrine Blazy

12:30 Lunch

14:00 Technical Session (chair: Pablo Nogueira)

A Semantics for Weakly Encapsulated Search in Functional Logic Programs

Jan Christiansen, Michael Hanus, Fabian Reck, Daniel Seidel

Are Needed Redexes Really Needed?

Sergio Antoy, Andy Jost

A Parameterized Graph Transformation Calculus for Finite Graphs with Monadic Branches

Kazuyuki Asada, Soichiro Hidaka, Hiroyuki Kato, Zhenjiang Hu, Keisuke Nakano

15:30 Coffee Break

16:00 Technical Session (chair: Sergio Antoy)

Deriving the Full-Reducing Krivine Machine from the Small-Step Operational Semantics of Normal Order

Álvaro García-Pérez, Pablo Nogueira, Juan José Moreno-Navarro

A Synthetic Operational Account of Call-by-Need Evaluation

Olivier Danvy, Ian Zerny

A Logical Correspondence between Natural Semantics and Abstract Machines

Robert Simmons, Ian Zerny

Tuesday 17 September

9:00 Technical Session (chair: Stefan Holdermans)

Engineering Definitional Interpreters

Jan Midtgaard, Norman Ramsey, Bradford Larsen

Extensible Sparse Functional Arrays with Circuit Parallelism

John T. O'Donnell

Dependent Types for Enforcement of Information Flow, Erasure Policies in Heterogeneous Data Structures

Gordon Stewart, Anindya Banerjee, Aleksandar Nanevski

10:30 Coffee Break

11:00 Technical Session (chair: Fred Mesnard)

Reasoning About Higher-Order Relational Specifications

Yuting Wang, Kaustuv Chaudhuri, Andrew Gacek, Gopalan Nadathur

Time Refinement in a Functional Synchronous Language

Louis Mandel, Cédric Pasteur, Marc Pouzet

Unifying the Knuth-Bendix, Recursive Path and Polynomial Orders

Akihisa Yamada, Keiichirou Kusakari, Toshiki Sakabe

12:30 Lunch

14:00 Technical Session (chair: John O'Donnell)

Theory Propagation and Rational Trees

Ed Robbins, Andy King, Jacob Howe

Decentralized Execution of Constraint Handling Rules for Ensembles

Edmund Soon Lee Lam, Iliano Cervesato

Finite Type Extensions in Constraint Programming

Rafael Caballero, Peter Stuckey, Antonio Tenorio Fornés

15:30 Coffee Break

16:00 Technical Session (chair: Meng Wang)

Eventual Linear Ranking Functions

Roberto Bagnara, Fred Mesnard

Detecting decidable classes of finitely ground logic programs with function symbols

Marco Calautti, Sergio Greco, Irina Trubitsyna

Shape Analysis in a Functional Language by Using Regular Languages

Manuel Montenegro, Ricardo Peña, Clara Segura

Wednesday 18 September

9:00 Invited talk (chair: Michael Hanus)

Peter Stuckey: *Search is dead – long live proof*

10:00 Technical Session (chair: Michael Hanus)

Efficient Computation of Program Equivalence for Confluent Concurrent Constraint Programming

Luis Pino, Filippo Bonchi, Frank Valencia

10:30 Coffee Break

11:00 Technical Session (chair: Clara Segura)

Random Testing of Purely Functional Abstract Datatypes

Stefan Holdermans

Prolog Programming with a Map-Reduce Parallel Construct

Joana Côrte-Real, Inês Dutra, Ricardo Rocha

Bidirectionalization for Free with Runtime Recording – Or, a Light-Weight Approach to the View-Update Problem

Kazutaka Matsuda, Meng Wang

12:30 Lunch

14:00 Excursion and Banquet