LICS 2008
Preliminary Program

Tue Jun 24, AM
University Center, McConomy Auditorium

Session 1 (Joint CSF/LICS)

8:30 – 9:30
David Basin (Invited Talk, CSF/LICS)
*Cryptographically Sound Protocol-Model Abstractions*

9:30 – 10:00
Rohit Chadha, A. Prasad Sistla and Mahesh Viswanathan (LICS)
*On the Expressivity and Complexity of Randomization in Finite State Monitors*

10:00 – 10:30
Henry DeYoung, Deepak Garg and Frank Pfenning (CSF)
*An Authorization Logic with Explicit Time*

10:30 – 11:00 Coffee Break

Session 2 (Joint CSF/LICS)

11:00 – 11:30
Yuri Gurevich and Itay Neeman (CSF)
*DKAL: Distributed-Knowledge Authorization Language*

11:30 – 12:00
Glenn Bruns and Michael Huth (CSF)
*Access-Control Policies via Belnap Logic: Effective and Efficient Composition and Analysis*

12:00 – 12:30
Jeffrey Vaughan, Limin Jia, Karl Masurak and Steve Zdancewic (CSF)
*Evidence-Based Audit*

12:30 – 2:00 Lunch (Rangos Hall 2, 3)
Tuesday Jun 24, PM
Giant Eagle Auditorium, Baker Hall A51

Session 3 (LICS, Logical Frameworks)

2:00 – 2:30
Andrew Gacek, Dale Miler and Gopalan Nadathur
Combining Generic Judgments with Recursive Definitions

2:30 – 3:00
Christian Urban, James Cheney and Stefan Berghofer
Mechanizing the Theory of LF

3:00 – 3:30
Marcelo Fiore
Second-Order and Dependently-Sorted Abstract Syntax

3:30 – 4:00
Carsten Schürmann and Jeffrey Sarnat
Structural Logical Relations

4:00 – 4:30 Coffee Break

Session 4 (LICS, Lambda Calculus)

4:30 – 5:00
Makoto Tatsuta
Types for Hereditary Permutators

5:00 – 5:30
Adria Gascón, Guillem Godoy and Manfred Schmidt-Schauss
Context Matching for Compressed Terms

Session 5 (Joint LICS/CSF)

5:30 – 6:30 Short Talks

Evening Event (Joint CSF/LICS)
7:00 – 9:00 Reception, Phipps Conservatory
Wed Jun 25, AM
Giant Eagle Auditorium, Baker Hall A51

Session 6 (LICS)

8:30 – 9:30
Dexter Kozen (Invited Talk)
Nonlocal Flow of Control and Kleene Algebra with Tests

9:30 – 10:00
Gordon Plotkin and Matija Pretnar
A Logic for Algebraic Effects

10:00 – 10:30
Emmanuel Beffara
An Algebraic Process Calculus

10:30 – 11:00 Coffee Break

Session 7 (LICS, Process Calculi)

11:00 – 11:30
Ivan Lanese, Jorge A. Perez, Davide Sangiorgi and Alan Schmitt
On the Expressiveness and Decidability of Higher-Order Process Calculus

11:30 – 12:00
Taolue Chen and Wan Fokkink
On the Axiomatizability of Impossible Futures: Preorder versus Equivalence

12:00 – 12:30
Sam Staton
General Structural Operational Semantics through Categorical Logic

12:30 – 2:00 Lunch (Rangos Hall, University Center)
Wed Jun 25, PM
Giant Eagle Auditorium, Baker Hall A51

Session 8 (LICS, Model Checking)

2:00 – 2:30
Vineet Kahlon
Parameterization as Abstraction: A Tractable Approach to the Dataflow Analysis of Concurrent Programs

2:30 – 3:00
Arnaud Carayol, Matthew Hague, Antoine Meyer, Luke Ong and Olivier Serre
Winning Regions of Higher-Order Pushdown Games

3:00 – 3:30
Pierre Chambart and Philippe Schnoebelen
The Ordinal Recursive Complexity of Lossy Channel Systems

3:30 – 4:00
Christel Baier, Nathalie Bertrand, Patricia Bouyer, Thomas Brihaye and Marcus Groesser
Almost-Sure Model Checking of Infinite Paths in One-Clock Timed Automata

4:00 – 4:30 Coffee Break

Session 9 (LICS, Proof Theory)

4:30 – 5:00
Agata Ciabattoni, Nikolaos Galatos and Kazushige Terui
From Axioms to Analytic Rules in Nonclassical Logics

5:00 – 5:30
Daniel Licata, Noam Zeilberger and Robert Harper
Focusing on Binding and Computation

5:30 – 6:00
Guillaume Burel
A First-Order Representation of Pure Type Systems using Superdeduction

Evening Events

6:00 – 6:30 Award Presentations
6:30 – 7:30 LICS Business Meeting
Thur Jun 26, AM
Giant Eagle Auditorium, Baker Hall A51

Session 10 (LICS, Computational Complexity)

8:30 – 9:30
Martin Grohe (Invited Talk)
The Quest for a Logic Capturing PTIME

9:30 – 10:00
Soren Riis
On the Asymptotic Nullstellensatz and Polynomial Calculus Proof Complexity

10:00 – 10:30
Klaus Aehlig and Arnold Beckmann
On the Computational Complexity of Cut-Reduction

10:30 – 11:00 Coffee Break

Session 11 (LICS, Constraints)

11:00 – 11:30
Victor Dalmau and Benoit Larose
Maltsev + Datalog → Symmetric Datalog

11:30 – 12:00
Catarina Carvalho, Victor Dalmau and Andrei Krokhin
Caterpillar Duality for Constraint Satisfaction Problems

12:00 – 12:30
Barnaby Martin, Florent Madelaine and Hubie Chen
Quantified Constraints and Containment Problems

12:30 – 2:00 Lunch (Rangos Hall, University Center)
Thur Jun 26, PM
Giant Eagle Auditorium, Baker Hall A51

Session 12 (LICS, Reasoning about Programs)

2:00 – 2:30
Francois Pottier
*Hiding Local State in Direct Style: A Higher-Order Anti-Frame Rule*

2:30 – 3:00
Soren Lassen and Paul Blain Levy
*Typed Normal Form Bisimulation for Parametric Polymorphism*

3:00 – 3:30
Andrzej Murawski
*Reachability Games and Game Semantics: On Comparing Nondeterministic Programs*

3:30 – 4:00
Abbas Edalat
*Weak Topology and Differentiable Operator for Lipschitz Maps*

4:00 – 4:30 Coffee Break

Session 13 (LICS, Probabilistic Systems)

4:30 – 5:00
James F. Lynch
*A Logical Characterization of Individual-Based Models*

5:00 – 5:30
Tomas Brazdil, Jan Kretinsky, Antonin Kucera and Vojtech Forejt
*The Satisfiability Problem for Probabilistic CTL*

Evening Event

8:00 – 10:00 LICS Banquet (Heinz History Center)
Fri Jun 27, AM
Giant Eagle Auditorium, Baker Hall A51

Session 14 (LICS, Finite Model Theory)

8:30 – 9:30
Yiannis Moschovakis (Invited Talk)
*The Axiomatic Derivation of Absolute Lower Bounds*

9:30 – 10:00
Martin Grohe
*Definable Tree Decompositions*

10:00 – 10:30
David Duris
*Hypergraph Acyclicity and Extension Preservation Theorems*

10:30 – 11:00 Coffee Break

Session 15 (LICS, Automata Theory)

11:00 – 11:30
Greg Hjorth, Bakhadyr Khoussainov, Antonio Montalbán and Andre Nies
*From Automatic Structures to Borel Structures*

11:30 – 12:00
Mikolaj Bojanczyk, Luc Segoufin and Howard Straubing
*Piecewise Testable Tree Languages*

12:00 – 12:30
Matthew Hague, Andrzej Murawski, Luke Ong and Olivier Serre
*Collapsible Pushdown Automata and Recursion Schemes*

12:30 – 1:00 Box Lunch (Rangos Hall, University Center)
Fri Jun 27, PM
Giant Eagle Auditorium, Baker Hall A51

Session 16 (LICS, Linear Logic)

1:00 – 1:30
Marc de Falco
*The Geometry of Interaction of Differential Interaction Nets*

1:30 – 2:00
Virgile Mogbil and Paulin Jacobé de Naurois
*Correctness of Multiplicative Additive Proof Structures is NL-Complete*

2:00 – 2:30
Roberto Maieli and Olivier Laurent
*Cut Elimination for Monomial MALL Proof Nets*

2:30 – 3:00
Olivier Delande and Dale Miller
*A Neutral Approach to Proof and Refutation in MALL*

3:00 End of Conference