15th EACSL Annual Conference on Computer Science Logic

Sept. 25–29, 2006, Szeged, Hungary

Hotel Novotel, Tisza Lajos Hall

Szeged, Maros u. 1.

Programme

Monday, September 25

8:45 **Opening of CSL'06**

Session 1: Decidable Theories of Infinite Structures
Chair: Johann Makowsky

9:00 **Invited Lecture:**
Some Results on a Game-Semantic Approach to Verifying Finitely-Presentable Infinite Structures
C.-H. Luke Ong (Oxford, UK)

10:00 **On Rational Trees**
Arnaud Carayol and Christophe Morvan (Rennes, France)

10:30 **Break**

Session 2: Logic and Computational Complexity I
Chair: Bruno Courcelle

11:00 **Complete Problems for Higher Order Logics**
Lauri Hella (Tampere, Finland) and José María Turull-Torres (Wellington, New Zealand)

11:30 **Collapsibility in Infinite Domain Quantified Constraint Satisfaction**
Manuel Bodirsky (Berlin, Germany) and Hubie Chen (Barcelona, Spain)

12:00 **MSO Queries on Tree Decomposable Structures are Computable with Linear Delay**
Guillaume Bagan (Caen, France)

12:30 **Lunch**

Session 3: Model Checking I
Chair: Mirosław Truszczyński

14:00 **Nash Equilibrium for Upward-Closed Objectives**
Krishnendu Chatterjee (Berkeley, CA, USA)

14:30 **Visibly Pushdown Automata: From Language Equivalence to Simulation and Bisimulation**
Jiří Srba (Aalborg, Denmark)

15:00 **Algorithms for Omega-Regular Games with Imperfect Information**
Krishnendu Chatterjee (Berkeley, CA, USA), Laurent Doyen (Brussels, Belgium), Thomas A. Henzinger (Lausanne, Switzerland) and Jean-François Raskin (Brussels, Belgium)

15:30 **Break**

Session 4: Lambda-Calculus and Combinatory Logic
Chair: C.-H. Luke Ong

16:00 **A Finite Semantics of Simply-Typed Lambda Terms for Infinite Runs of Automata**
Klaus Aehlig (Munich, Germany)

16:30 **The Power of Linear Functions**
Sandra Alves (Porto, Portugal), Maribel Fernández (London, UK), Mário Florido (Porto, Portugal) and Ian Mackie (Paris, France)

17:00 **Break**

Session 5: Verification
Chair: Marius Minea

17:10 **Relating Two Standard Notions of Secrecy**
Véronique Cortier, Michaël Rusinowitch and Eugen Zălinescu (LORIA, Nancy, France)

17:40 **Separation Logic for Higher-Order Store**
Bernhard Reus (Univ. of Sussex, UK) and Jan Schwinghammer (Saarbrücken, Germany)

19:00–22:00 **Welcome Party** (Hotel Novotel, Tisza Garden Brasserie)

Tuesday, September 26

Session 6: Logic and Automata I
Chair: Thomas Schwentick

9:00 **Invited Lecture:**
Automata and Logics for Words and Trees over an Infinite Alphabet
Luc Segoufin (Paris, France)

10:00 **Solving Games without Determinization**
Thomas A. Henzinger and Nir Piterman (Lausanne, Switzerland)

10:30 **Break**

Session 7: Finite Model Theory
Chair: Johann Makowsky

11:00 **First-Order Queries over One Unary Function**
Arnaud Durand (Paris, France) and Frédéric Olive (Univ. of Provence, France)

11:30 **On the Expressive Power of Graph Logic**
Jerzy Marcinkowski (Wrocław, Poland)

12:00 **Universal Structures and the Logic of Forbidden Patterns**
Florent Madelaine (Durham, UK)

12:30 **Lunch**

Session 8: Constructive Mathematics and Type Theory
Chair: Martín Escardó

14:00 **Normalization of IZF with Replacement**
Wojciech Moczydłowski (Cornell Univ, NY, USA)

14:30 **Semi-continuous Sized Types and Termination**
Andreas Abel (Munich, Germany)

15:00 **A Sequent Calculus for Type Theory**
Stéphane Lengrand, Roy Dyckhoff and James McKinna (Univ. of St Andrews, Scotland)

15:30 **Break**

Ackermann Award Ceremony

16:00 **Report of the Ackermann Award Jury**
Johann Makowsky (Jury Chair, Haifa, Israel)

16:15 **Thesis: Model Theory for Extended Modal Languages**
Balder ten Cate (Univ. of Amsterdam, The Netherlands)

16:45 **Thesis: Coalgebras, Monads and Semantics**
Stefan Milius (Braunschweig, Germany)

Wednesday, September 27

Session 9: Logic and Algebra
Chair: R. Ramanujam

9:00 **Invited Lecture:**
Nonmonotonic Logics and Their Algebraic Foundations
Mirosław Truszczyński (Lexington, KY, USA)

10:00 **Break**

Session 10: Logic and Computational Complexity II
Chair: Damian Niwiński

10:30 **An Algebraic Point of View on the Crane Beach Property**
Clemens Lautemann, Pascal Tesson (Laval Univ, Canada) and Denis Thérien (McGill Univ, Canada)

11:00 **Space-Efficient Computation by Interaction – A Type System for Logarithmic Space**
Ulrich Schöpp (Munich, Germany)

11:30 **Towards an Implicit Characterization of NC^k**
Guillaume Bonfante (LORIA, Nancy, France), Reinhard Kahle (Coimbra, Portugal), Jean-Yves Marion (LORIA, Nancy, France) and Isabel Oitavem (Lisbon, Portugal)

12:00 **Lunch**

14:00–16:00 **Sightseeing in Szeged** (Starting from Hotel Novotel)

16:00–16:30 **Organ Concert in the Dom**

18:00–19:30 **EACSL Assembly** (Hotel Novotel)

Thursday, September 28

Session 11: Categories and Linear Logic
Chair: Damian Niwiński

9:00 **Invited Lecture:**
Functorial Boxes in String Diagrams
Paul-André Melliès (Paris, France)

10:00 **A Jump from Parallel to Sequential Proofs: Multiplicatives**
Paolo Di Giamberardino (Rome, Italy) and Claudia Faggian (Padua, Italy)

10:30 **Break**

Session 12: Model Checking II
Chair: Thomas Schwentick

11:00 **Concurrent Games with Tail Objectives**
Krishnendu Chatterjee (Berkeley, CA, USA)

11:30 **Infinite State Model-Checking of Propositional Dynamic Logics**
Stefan Göller and Markus Lohrey (Stuttgart, Germany)

12:00 **Decidable Theories of the Ordering of Natural Numbers with Unary Predicates**
Alexander Rabinovich (Tel Aviv, Israel) and Wolfgang Thomas (Aachen, Germany)

12:30 **Lunch**

Session 13: Logical Foundations of Programming Paradigms
Chair: Bruno Courcelle

14:00 **Universality Results for Models in Locally Boolean Domains**
Tobias Löw and Thomas Streicher (Darmstadt, Germany)

14:30 **Reasoning about States of Probabilistic Sequential Programs**
Rohit Chadha, Paulo Mateus and Amilcar Sernadas (Lisbon, Portugal)

15:00 **Abstracting Allocation: The New New Thing**
Nick Benton (Microsoft Research, Cambridge, UK)

15:30 **Break**

Session 14: Linear Logic
Chair: Paul-André Melliès

16:00 **Acyclicity and Coherence in Multiplicative Exponential Linear Logic**
Michele Pagani (Rome, Italy)

16:30 **Verification of Ptime Reducibility for System F Terms via Dual Light Affine Logic**
Vincent Atassi, Patrick Baillot (Paris, France) and Kazushige Terui (National Ins. of Inf, Japan)

17:00 **Break**

Session 15: Processes and Modal Logic
Chair: R. Ramanujam

17:10 **Weak Bisimulation Approximants**
Will Harwood, Faron Moller and Anton Setzer (Swansea, UK)

17:40 **Logical Omniscience via Proof Complexity**
Sergei Artemov and Roman Kuznets (City Univ. of New York, USA)

19:30 **Conference Dinner** (Restaurant Szeged, Széchenyi square 9.)

Friday, September 29

Session 16: Logic and Computation
Chair: Zoltán Ésik

 9:00 **Invited Lecture:**
    Topology, Logic and Computation
    Martín Escardó (Birmingham, UK)

10:00 **Hoare Logic in the Abstract**
    Ursula Martin, <u>Erik A. Mathiesen</u> and Paulo Oliva (London, UK)

10:30 **Break**

Session 17: Logic and Automata II
Chair: Luc Segoufin

11:00 **Satisfiability and Finite Model Property for the Alternating-Time μ-Calculus**
    <u>Sven Schewe</u> and Bernd Finkbeiner (Saarbrücken, Germany)

11:30 **Game Quantification on Automatic Structures and Hierarchical Model Checking Games**
    Łukasz Kaiser (Aachen, Germany)

12:00 **Church Synthesis Problem with Parameters**
    Alexander Rabinovich (Tel Aviv, Israel)

12:30 **Closing of CSL'06**

12:40 **Lunch**

Registration at Hotel Novotel, Szeged, Maros u. 1.

Monday	8:00 – 12:00
Tuesday	8:30 – 12:00
Wednesday	8:30 – 12:00

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