WoLLIC2007

Conference Program

Coffee breaks: 10am - 10:15am, 3:30pm - 3:45pm. ** BCSC Opening cocktail: Tuesday, July 4 - 7pm BCSC Conference dinner: Wednesday, July 5 - 8pm Monday, July 2 Session 1. Chair: Ruy de Queiroz 8am - 9am Achim Jung (Tutorial). Stone duality 9am - 10am Philippa Gardner (Invited talk). Context logic and tree update Session 2. Chair: Yde Venema 10:15am -11:15am Martin Escardo (Invited talk). Algorithmic topology of program types 11:15am - 12:15am Achim Jung (Invited talk). On the interplay of logic and information: a topological analysis Session 3. Chair: Philippa Gardner 1:30pm - 2pm Sabine Broda and Luis Damas. On principal types of BCK-lambda-terms 2pm - 2:30pm

A formal calculus for informal equality with binding

Murdoch Gabbay and Aad Mathijssen.

2:30pm - 3:30pm

Alexandra Silva and Jan Rutten. Behavioral differential equations and coinduction for binary trees

Session 4. Chair: Petrucio Viana

3:45pm - 4:15pm

Andre Hirschowitz and Marco Maggesi. Modules over monads and linearity

4:15pm - 4:45pm

Thomas Bolander and Rene Rydhof Hansen. Hybrid logical analyses of the ambient calculus

Tuesday, July 3

Session 5. Chair: Marcelo Correa

8am -9am

Michael Moortgat (Invited talk). Symmetries in natural language syntax and semantics: the Lambek-Grishin calculus

9am - 9:30am

Denis Bechet and Annie Foret. Fully lexicalized pregroup grammars

9:30am - 10am

Alexander Dikovsky.
A finite-state functional grammar architecture

Session 6. Chair: Mario Benevides

10:15am - 10:45am

Kim Solin.

A sketch of a dynamic epistemic semiring

10:45am - 11:15am

Annie Foret.

Pregroup calculus as a logic functor

11:15am - 11:45am

Raffaella Bernardi and Michael Moortgat. Continuation semantics for symmetric categorial grammar

Session 7. Chair: Hermann Haeusler

1:30pm - 2:30pm

Alex Borgida (Invited talk).

Description Logics: formal foundations and applications

2:30pm - 3pm

Sven Hartmann and Sebastian Link.

Numerical constraints for XML

3pm - 3:30pm

Renata Reiser, Gracaliz Dimuro, Benjamin Bedregal and Regivan Santiago. Interval valued ${\tt QL-implications}$

Session 8. Chair: Alex Borgida

3:45pm - 4:15pm

Benjamin Bedregal, Roberto Callejas-Bedregal and Helida Santos. Bounded lattice t-norms as an interval category

4:15pm - 4:45pm

Ryan Bissell-Siders.

Ehrenfeucht-Fraisse games on linear orders

Wednesday, July 4

Session 9. Chair: Renata de Freitas

8am - 8:30am

Marcos Villagra and Benjamin Baran. Ant colony optimization With adaptive fitness function for satisfiability testing

8:30am - 9am

Ariya Isihara. Hydra games and tree ordinals

9am - 10am

Louis Kaufmann (Tutorial). Quantum topology and quantum computation

Session 10. Chair: Paulo Oliva

10:15am - 11:15am

Louis Kaufmann (Invited talk). Spin networks in quantum computation

11:15am - 12:15pm

Yde Venema (Invited talk). A modal distributive law

Session 11. Chair: Martin Escardo

1:30pm - 2:30pm

Alessandra Carbone (Invited talk). Group Theory and Classical Proofs

2:30pm - 3:30pm

Paulo Oliva (Invited talk). Computational interpretations of classical linear logic

Session 12. Chair: Luiz Carlos Pereira

3:45pm - 4:15pm

Andre Luiz Galdino, Cesar Munoz and Mauricio Ayala-Rincon. Formal verification of an optimal air traffic conflict resolution and recovery algorithm

4:15pm - 4:45pm

Hicham Bensaid, Ricardo Caferra and Nicolas Peltier. Towards a systematic analysis of theorem provers search spaces

4:45pm - 5:15pm

Joachim Baran and Howard Barringer.
A grammatical representation of visibly pushdown languages

Thursday, July 5

Session 13. Chair: Marcelo Finger

8am - 9am

John Reif (Tutorial) Biological computing

9am - 10am

Alessandra Carbone (Invited talk). Genome synthesis and genomic functional cores

Session 14. Chair: Daniel Leivant

10:15am - 11:15am

Louis Kauffman (Invited talk). Biologic

11:15am - 12:15pm

John Reif (Invited talk).

Autonomous programmable biomolecular devices using self-assembled DNA nanostructures Specifying properties of data