# Seventh International Conference on Typed Lambda Calculi and Applications (TLCA '05)

# Nara, Japan, 21-23 April 2005

http://www.kurims.kyoto-u.ac.jp/rdp05/tlca/

# PROGRAMME (Ver. 31 March 2005)

### Thursday, 21st April

09:00-10:00 Amy Felty (invited speaker, joint with RTA)

A Tutorial Example of the Semantic Approach to Foundational Proof-Carrying Code

10:30-11:00 Olivier Hermant

Semantic Cut Elimination in the Intuitionistic Sequent Calculus

11:00-11:30 René David and Karim Nour

Arithmetical Proofs of Strong Normalization Results for the Symmetric  $\lambda\mu$ -calculus

11:30-12:00 François Lamarche and Lutz Straßburger

Naming Proofs in Classical Propositional Logic

12:00-12:30 François-Régis Sinot

Call-by-Name and Call-by-Value as Token-Passing Interaction Nets

14:00-14:30 Andreas Abel and Thierry Coquand

Untyped Algorithmic Equality for Martin-Löf's Logical Framework with Surjective Pairs 14:30-15:00 Hugo Herbelin

On the Degeneracy of  $\Sigma$ -Types in Presence of Computational Classical Logic

15:00-15:30 Ken-etsu Fujita

Galois Embedding from Polymorphic Types into Existential Types

#### Friday, 22nd April

09:00-10:00 Susumu Hayashi (invited speaker)

Can Proofs Be Animated by Games?

10:30-11:00 Carsten Schürmann, Adam Poswolsky and Jeffrey Sarnat

The  $\nabla$ -Calculus. Functional Programming with Higher-Order Encodings

11:00-11:30 Christian Urban and James Cheney

Avoiding Equivariance in Alpha-Prolog

11:30-12:00 Peter Selinger and Benoît Valiron

A Lambda Calculus for Quantum Computation with Classical Control

12:00-12:30 Greg Morrisett, Amal Ahmed, Matthew Fluet

 $L^3$ : A Linear Language with Locations

14:00-14:30 John Power and Miki Tanaka

Binding Signatures for Generic Contexts

14:30-15:00 Sam Lindley and Ian Stark

Reducibility and  $\top \top$ -Lifting for Computation Types

15:00-15:30 Nick Benton and Benjamin Leperchey

Relational Reasoning in a Nominal Semantics for Storage

16:00-16:30 Paolo Coppola, Ugo Dal Lago and Simona Ronchi Della Rocca

Elementary Linear Logics and the Call-by-Value Lambda Calculus

16:30-17:00 Patrick Baillot and Kazushige Terui

A Feasible Algorithm for Typing in Elementary Affine Logic

17:00-17:30 Ferruccio Damiani

Rank-2 Intersection and Polymorphic Recursion

# Saturday, 23rd April

09:00-10:00 Thierry Coquand (invited speaker)

Completeness Theorems and  $\lambda$ -calculus

10:30-11:00 Yves Bertot

Filters on CoInductive Streams, an Application to Eratosthenes' Sieve

11:00-11:30 Virgile Prevosto and Sylvain Boulmé

Proof Contexts with Late Binding

11:30-12:00 Stan Matwin, Amy Felty, István Hernádvölgyi and Venanzio Capretta

Privacy in Data Mining Using Formal Methods

12:00-12:30 Damiano Zanardini

Higher-Order Abstract Non-Interference

14:00-14:30 Klaus Aehlig, Jolie G de Miranda and C.-H. Luke Ong

The Monadic Second Order Theory of Trees Given by Arbitrary Level Two Recursion Schemes Is Decidable

14:30-15:00 Paula Severi and Fer-Jan de Vries

Continuity and Discontinuity in Lambda Calculus

15:00-15:30 Jim Laird

The Elimination of Nesting in SPCF

16:00-16:30 Ana Bove and Venanzio Capretta

Recursive Functions with Higher Order Domains

16:30-17:00 Gilles Barthe, Benjamin Grégoire and Fernando Pastawski

Practical Inference for Typed-Based Termination in a Polymorphic Setting

17:00-17:30 Roberto Di Cosmo, François Pottier and Didier Rémy

Subtyping Recursive Types Modulo Associative Commutative Products