

# Programme of QAPL08 at ETAPS 2008

(Sixth Workshop on Quantitative Aspects of Programming Languages)

**Saturday, March 29**

**09:30 - 10:30 SESSION 1**

*INVITED TALK*

**Timed Controller Synthesis**

Jean-Francois Raskin, Universite Libre de Bruxelles, Belgium

**10:30 - 11:00 Coffee**

**11:00 - 12:30 SESSION 2**

*Probabilistic Abstractions*

**Game-Based Probabilistic Predicate Abstraction in PRISM**

Mark Kattenbelt, Marta Kwiatkowska, Gethin Norman and David Parker

**Relational Analysis and Precision via Probabilistic Abstract Interpretation**

Alessandra Di Pierro, Pascal Sotin and Herbert Wiklicky

**Probabilistic Abstract Interpretation of Imperative Programs using Truncated Normal Distributions**

Michael Smith

**12:30 - 14:30 Lunch**

**14:30 - 16:00 SESSION 3**

*Model Checking*

**Model checking Quantitative Linear Time Logic**

Axel Legay, Marielle Stoelinga and Marco Faella

**Probabilistic Logic over Paths**

Evan Tzanis and Robin Hirsch.

**Probabilistic model checking in neural cryptography. Preliminary Report**

Alexei Lisitsa

**16:00 - 16:30 Coffee**

**16:30 - 17:00 SESSION 4**

*Software Verification I*

**Towards a metrics for Open Source Software Quality**

Siraj Shaikh and Antonio Cerone

**Sunday, March 30**

**09:30 - 10:30 SESSION 1**

*Program Analysis*

**Platform Independent Timing of Java Virtual Machine Bytecode Instructions**

Jonathan Lambert and James Power

**Measuring Progress of Java PathFinder Model-Checking Randomized Sequential Code**

Xin Zhang and Franck van Breugel

**10:30 - 11:00 Coffee**

**11:00 - 12:30 SESSION 2**

*Semantics of Probabilistic Systems*

**A Behavioural Pseudometric based on lambda-Bisimilarity**

Jinjin Zhang and Zhaohui Zhu

**Branching bisimulation congruence for probabilistic systems**

Nikola Trcka and Sonja Georgievska

**Stochastic Satisfiability Modulo Theory: A Novel Technique for the Analysis of Probabilistic Hybrid Systems**

Martin Fränzle, Holger Hermanns and Tino Teige

**12:30 - 14:00 Lunch**

**14:00 - 15:00 SESSION 3**

*INVITED TALK*

**Formal Modelling and Analysis of Quantum Protocols**

Simon Gay, University of Glasgow, UK

**15:00 - 16:00 SESSION 4**

*Software Verification II*

**Oracle-Based Poly-Controlled Partial Evaluation**

Claudio Ochoa and German Puebla

**Verification of Resource Requirements of Distributed Reasoning Agents**

Natasha Alechina, Brian Logan, Hoang Nga Nguyen and Abdur Rakib

**16:00 - 16:30 Coffee**

**16:30 - 17:30 SESSION 5**

*Stochastic Process Calculi*

**On the Approximation of Stochastic Concurrent Constraint Programming by Master Equation**

Luca Bortolussi

**Modelling FGFR intracellular fate with BioAmbients**

Steffen van Bakel, Ikra Kahn, John Heath and Maria Grazia Vigliotti.