GAMES 2009

Udine, 14-17 September, 2009

organized by the ESF Project "Games for Design and Verification 2008-13"

Sunday - 13 September 2009 (Casa della Contadinanza, Castello di Udine)

19:00-22:00 Welcome Reception (and Pre-Registration)

Monday - 14 September 2009 (Salone del Parlamento, Castello di Udine)

08:45-09:00 Opening (and Registration)

09:00-10:30 Introductory tutorial: **Games and Automata for Verification**, Christof Löding, University of Aachen, Germany

10:30-11:00 Coffee break

11:00-12:30 Introductory tutorial: **Ehrenfeucht-Fraïssé Games: Applications and Complexity**, Angelo Montanari and Nicola Vitacolonna, University of Udine, Italy

12:30-13:30 Lunch (Casa della Contadinanza, Castello di Udine)

13:30-15:00 Advanced tutorial: **Programming Model-Checkers using a Fixed-Point Calculus**, Salvatore La Torre, University of Salerno, Italy

15:00-15:30 Coffee break

15:30-15:55 Algebra for Infinite Forests with an Application to the Temporal Logic EF, Mikolaj Bojanczyk and Tomasz Idziaszek

15:55-16:10 Branching-time model checking of one-counter processes, Stefan Göller and Markus Lohrey

16:10-16:35 Balance Games on Colored Graphs, Alessandro Bianco, Marco Faella, Fabio Mogavero, and Nello Murano

16:35-16:50 An Antichain Algorithm for LTL Realizability, Emmanuel Filiot, Naiyong Jin and Jean-François Raskin

16:50-17:05 Assume-Guarantee verification of Hybrid Systems in ARIADNE, Davide Bresolin and Tiziano Villa

17:05-17:35 Break

17:35-18:00 One-Counter Markov Decision Processes, Tomas Brazdil, Vaclav Brozek, Kousha Etessami, Antonin Kucera, and Dominik Wojtczak

18:00-18:15 Stochastic Games with Partial Observation: Decidable and Undecidable Problems, Hugo Gimbert and Youssouf Oualhad

18:15-18:30 Multipebble simulation relations for alternating Buchi automata, Lorenzo Clemente

Tuesday - 15 September 2009 (Salone del Parlamento, Castello di Udine)

08:30-10:00 Advanced tutorial: **Beyond ω-Regular Languages**, Mikolaj Bojanczyk, University of Warsaw, Poland

10:00-10:30 Coffee break

10:30-10:55 Tree Automata with Costs for Boundedness Problems, Thomas Colcombet and Christof Löding

10:55-11:10 Automata on Countable Linear Orderings, Olivier Carton, Thomas Colcombet, and Gabriele Puppis

11:10-11:25 Concavely-priced probabilistic timed automata, M. Jurdzinski, M. Kwiatkowska, G. Norman, and A. Trivedi

11:25-11:35 Break

11:35-12:00 The Wadge Hierarchy of Max-Regular Languages, Jeremie Cabessa, Jacques Duparc, Alessandro Facchini, and Filip Murlak

12:00-12:15 Deterministic Automata and Extensions of Weak MSO, Mikolaj Bojanczyk and Szymon Torunczyk

12:15-12:30 Register Automata vs. FO on Data Words, Michael Benedikt and Clemens Ley

12:30-13:30 Lunch / Steering Committee Meeting (Casa della Contadinanza, Castello di Udine)

13:30-15:00 Advanced tutorial: **An Introduction to Algorithmic Game Semantics**, Guy McCusker, University of Bath, UK

15:00-15:30 Coffee break

15:30-15:55 What is Memory in a Random Strategy, Julien Cristau, Claire David, and Florian Horn

15:55-16:10 Variations on Sabotage: Obstruction and Cooperation, Nina Gierasimczuk, Lena Kurzen, and Fernando R. Velazquez-Quesada

16:10-16:35 Graded-CTL, Alessandro Ferrante, Margherita Napoli, Mimmo Parente

16:35-16:50 Graded Alternating-Time Temporal Logic, Marco Faella, Margherita Napoli, and Mimmo Parente

16:50-17:05 Life is Full of Shadings, Angelo Montanari, Gabriele Puppis, Pietro Sala, and Guido Sciavicco

17:05-17:35 Break

17:35-18:00 Games and 1-backtracking, Stefano Berardi, Pierre Clairambault, and Thierry Coquand

18:00-18:15 Conway Games, coalgebraically, Furio Honsell and Marina Lenisa

18:15-18:30 Type Assignment Systems for Game Semantics, Pietro Di Gianantonio, Furio Honsell, and Marina Lenisa

19:00-20:00 Special session on open problems (Sala Convegni, Palazzo Antonini)

Wednesday - 16 September 2009 (Salone del Parlamento, Castello di Udine)

08:30-10:00 Advanced tutorial: **Distributed Computing Meets Game Theory**, Joseph Y. Halpern, Cornell University, USA

10:00-10:30 Coffee break

10:30-10:55 Logics for strategies: a quest into the future, Johan van Benthem, Sujata Ghosh, and Rineke Verbrugge

10:55-11:10 An Epistemic - Geometric Extension of Game Logic,Can Baskent and Rohit Parikh

11:10-11:25 Explicit strategies in Dynamic Game Logic: the generic-game approach, Sujata Ghosh

11:25-11:35 Break

11:35-12:00 Infinite Coordination Games, Dietmar Berwanger

12:00-12:15 Equilibrium in Muller games with preference ordering, Soumya Paul and Sunil Simon

12:15-12:30 On the Complexity of Tree Pattern Matching, Anca Muscholl and Zhilin Wu

12:30-13:30 Lunch (Casa della Contadinanza, Castello di Udine)

13:30-15:00 Introductory tutorial: **Entropy Methods for Coordination and Communication in Games**, Olivier Gossner, CNRS, Paris-Jourdan Sciences Economiques, France and London School of Economics, UK

16:30-19:30 Visit to Cividale del Friuli (departure from Udine at 15:45)

20:00-24:00 Social dinner in Pulfero (departure to Udine at 23:00)

Thursday - 17 September 2009 (Sala Convegni, Polo Economico)

08:30-10:00 Introductory tutorial: **Equilibrium Refinements in Computational Game Theory**, Peter Bro Miltersen, Aarhus University, Denmark

10:00-10:30 Coffee break

10:30-10:55 Linear Complementarity Algorithms for Infinite Games, John Fearnley, Marcin Jurdzinski, and Rahul Savani

10:55-11:10 Prompt and Parametric LTL Games, Martin Zimmermann

11:10-11:25 Summarising Game Segments, Dietmar Berwanger and Loig Jezequel

11:25-11:35 Break

11:35-12:00 Faster Pseudo-Polynomial Algorithms for Mean-Payoff Games, Laurent Doyen, Raffaella Gentilini, and Jean-Francois Raskin

12:00-12:15 Game-theoretic simulation checking tool, Peter Bulychev

12:15-12:30 Partially-commutative context-free processes, Wojciech Czerwinski, Sibylle Froschle and Slawomir Lasota

12:30-13:30 Lunch (Polo Economico)

13:30-13:45 Undecidability of the Logic of the Overlap Relation over Discrete Linear Orderings, Davide Bresolin, Dario Della Monica, Valentin Goranko, Angelo Montanari, and Guido Sciavicco

13:45-14:00 The μ-calculus over transitive frames: expressiveness and the boundedness problem, Giovanna D'Agostino and Giacomo Lenzi

14:00-14:15 Tableau-like Automata-based Axiomatization for Propositional Linear Temporal Logic, Nikolay Shilov

14:15-14:30 A Decidable Spatial Logic with Cone-Shaped Cardinal Directions, Angelo Montanari, Gabriele Puppis, and Pietro Sala