

**Nice, 11-13 october 2023**

**RP 2023**

**PROGRAMME**

Wednesday, 11 October 2023	
09:20 10:20	Jarkko Kari (University of Turku, Finland) <b>Low complexity colorings of the two-dimensional grid</b>
10:20 10:40	Adrian Wurm <b>Complexity of Reachability Problems in Neural Networks</b>
10:40 11:00	Cinzia Di Giusto, Davide Ferré, Etienne Lozes and Nicolas Nisse <b>Weakly synchronous systems with three machines are Turing powerful</b>
11:00 11:20	Paul Bell, Reino Niskanen, Igor Potapov and Pavel Semukhin <b>On the Identity and Group Problems for Complex Heisenberg Matrices</b>
11:20 11:40	<b>Coffée break</b>
11:40 12:00	Daniela Bubboloni, Costanza Catalano, Andrea Marino and Ana Silva <b>On Computing Optimal Temporal Branchings</b>
12:00 12:20	Dmitry Zaitsev and Bernard Berthomieu <b>Sleptsov Nets are Turing-complete</b>
12:20 12:40	George Kenison, Joris Nieuwveld, Joel Ouaknine and James Worrell <b>Positivity Problems for Reversible Linear Recurrence Sequences</b>
12:40 13:00	Riccardo Gozzi and Olivier Bournez <b>Discontinuous IVPs with unique solutions</b>
13:00 14:30	<b>Lunch</b>
14:30 15:30	Nathalie Aubrun (Paris-Saclay University, France) <b>The Domino problem extended to groups</b>
15:30 15:50	Honglu Sun, Maxime Folschette and Morgan Magnin <b>Reachability analysis of a class of hybrid gene regulatory networks</b>
15:50 16:10	Thomas Brihaye, Véronique Bruyère and Gaspard Reghem <b>Quantitative Reachability Stackelberg-Pareto Synthesis is NEXPTIME-Comp.</b>
16:10 16:30	<b>Coffée break</b>
16:30 16:50	Eike Neumann <b>On the Complexity of Robust Eventual Inequality Testing for C-Finite Func.</b>
16:50 17:10	Pamela Fleischmann, Sungmin Kim, Tore Koß, Florin Manea, Dirk Nowotka, Stefan Siemer and Max Wiedenhöft <b>Matching Patterns with Variables Under Simon's Congruence</b>

Thursday, 12 October 2023

09:20 10:20	Bruno Martin (Côte d'Azur Université, France) <b>Randomness quality and trade-offs for random number generators</b>
10:20 10:40	Roland Guttenberg, Michael Raskin and Javier Esparza <b>Geometry of Reachability Sets of Vector Addition Systems</b>
10:40 11:00	Andrei Draghici, Christoph Haase and Florin Manea <b>Semënov Arithmetic, Affine VASS, and String Constraints</b>
11:00 11:20	Nikhil Balaji, Lorenzo Clemente, Klara Nosan, Mahsa Shirmohammadi and James Worrell <b>Multiplicity Problems on Algebraic Series and Context-Free Grammars</b>
11:20 11:40	<b>Coffée break</b>
11:40 12:00	Thomas Brihaye and Aline Goeminne <b>Multi-Weighted Reachability Games</b>
12:00 12:20	Alberto Casagrande and Carla Piazza <b>Adaptive Directions for Bernstein-based Polynomial Set Evolution</b>
12:20 12:40	Alain Finkel, Serge Haddad and Lina Ye <b>Introducing Divergence for Infinite Probabilistic Models</b>
12:40 13:00	Ramesh Krishnamurthy, Stijn Bellis, Guillermo Perez, Tim Leys, Ritam Raha, Joachim Denil <b>A Framework for the Competitive Analysis of Model Predictive Controllers</b>
13:00 14:30	<b>Lunch</b>
14:30 15:30	Dmitry Zaitsev (Odessa State Environmental University, Ukraine) <b>Sleptsov Net Computing Resolves Modern Supercomputing Problems</b>
15:30 15:50	George Kenison, Laura Kovács and Anton Varonka <b>Linear Loop Synthesis for Polynomial Invariants</b>
15:50 16:10	Uli Fahrenberg <b>Higher-Dimensional Automata Theory</b>
16:10 16:30	<b>Coffée break</b>
16:30 16:50	Laure Daviaud and Andrew Ryzhikov <b>Universality and Forall-Exactness of Cost Register Automata with Few Registers</b>
16:50 17:10	Karoliina Lehtinen <b>History-determinism vs. simulation</b>

**Friday, 13 October 2023**

09:20 10:20	Shinnosuke Seki (University of Electro-Communications, Japan) <b>How complex shapes can RNA fold into?</b>
10:20 10:40	David Auger, Pierre Coucheney, Loric Duhazé and Kossi Roland Etse <b>Generalized ARRIVAL Problem for Rotor Walks in Path Multigraphs</b>
10:40 11:00	Angelo Ferrando and Giorgio Delzanno <b>Hypermonitor: A Python Prototype for Hyper Predictive Runtime Verification</b>
11:00 11:20	<b>Coffée break</b>
11:20 11:40	Sven Dziadek, Uli Fahrenberg and Philipp Schlehuber <b>Energy Büchi Problems</b>
11:40 12:00	Marianne Akian, Stéphane Gaubert, Ulysse Naepels and Basile Terver <b>Solving irreducible stochastic mean-payoff games and entropy games by relative Krasnoselskii-Mann iteration</b>
12:00 12:20	Tatjana Shmeleva <b>Reenterable colored Petri net model of Ebola virus dynamics</b>
12:20 12:40	Olivier Bournez, Enrico Formenti and Igor Potapov <b>Closing and see you at the next edition</b>