Nice, 11-13 october 2023

RP 2023

PROGRAMME

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

	Thursday, 12 October 2023
09:20 10:20	Bruno Martin (Côte d'Azur Université, France) **Randomness quality and trade-offs for random number generators**
10:20 10:40	Roland Guttenberg, Michael Raskin and Javier Esparza **Geometry of Reachability Sets of Vector Addition Systems**
10:40 11:00	Andrei Draghici, Christoph Haase and Florin Manea **Semënov Arithmetic, Affine VASS, and String Constraints**
11:00 11:20	Nikhil Balaji, Lorenzo Clemente, Klara Nosan, Mahsa Shirmohammadi and James Worrell **Multiplicity Problems on Algebraic Series and Context-Free Grammars**
11:20 11:40	**Coffée break**
11:40 12:00	Thomas Brihaye and Aline Goeminne **Multi-Weighted Reachability Games**
12:00 12:20	Alberto Casagrande and Carla Piazza **Adaptive Directions for Bernstein-based Polynomial Set Evolution**
12:20 12:40	Alain Finkel, Serge Haddad and Lina Ye **Introducing Divergence for Infinite Probabilistic Models**
12:40 13:00	Ramesh Krishnamurthy, Stijn Bellis, Guillermo Perez, Tim Leys, Ritam Raha, Joachim Denil **A Framework for the Competitive Analysis of Model Predictive Controllers**
13:00 14:30	**Lunch**
14:30 15:30	Dmitry Zaitsev (Odessa State Environmental University, Ukraine) **Sleptsov Net Computing Resolves Modern Supercomputing Problems**
15:30 15:50	George Kenison, Laura Kovács and Anton Varonka **Linear Loop Synthesis for Polynomial Invariants**
15:50 16:10	Uli Fahrenberg **Higher-Dimensional Automata Theory**
16:10 16:30	**Coffée break**
16:30 16:50	Laure Daviaud and Andrew Ryzhikov **Universality and Forall-Exactness of Cost Register Automata with Few Registers**
16:50 17:10	Karoliina Lehtinen **History-determinism vs. simulation**

	Friday, 13 October 2023
09:20 10:20	Shinnosuke Seki (University of Electro-Communications, Japan) **How complex shapes can RNA fold into?**
10:20 10:40	David Auger, Pierre Coucheney, Loric Duhazé and Kossi Roland Etse **Generalized ARRIVAL Problem for Rotor Walks in Path Multigraphs**
10:40 11:00	Sven Dziadek, Uli Fahrenberg and Philipp Schlehuber **Energy Büchi Problems**
11:00 11:20	**Coffée break**
11:20 11:40	Marianne Akian, Stéphane Gaubert, Ulysse Naepels and Basile Terver **Solving irreducible stochastic mean-payoff games and entropy games by relative Krasnoselskii-Mann iteration**
11:40 12:00	Tatiana Shmeleva **Reenterable colored Petri net model of Ebola virus dynamics**
12:00 12:20	Laura Kovacs **Presentation of RP2024**
12:20 12:30	Olivier Bournez, Enrico Formenti and Igor Potapov **Closing and see you at the next edition**