CMC15

The 15th International Conference on Membrane Computing

August 20 – 22, 2014, Prague, Czech Republic

Program

Tuesday, August 19, 2014

17:30 – 20:00	Registration
18:00 – 19:00	Welcome Drink – Hotel Restaurant Il Giardino

Wednesday, August 20, 2014

08:30 – 09:00	Registration
09:00 – 09:05	**Opening** *Petr Sosík*
09:05 – 09:25	**A special session devoted to Yurii Rogozhin's vita** *Artiom Alhazov, Rudolf Freund and Sergey Verlan*

	Chair: Alberto Leporati
09:25 – 10:25	**P Systems with Active Membranes Working in Sublinear Space** *Claudio Zandron (with Alberto Leporati, Luca Manzoni, Giancarlo Mauri and Antonio E. Porreca)*
10:25 – 10:50	**Simulating Turing Machines with Polarizationless P Systems with Active Membranes** *Zsolt Gazdag, Miguel A. Gutiérrez-Naranjo and Gábor Kolonits*
10:50 – 11:20	Coffee Break
11:20 – 11:45	**Polymorphic P Systems with Non-cooperative Rules and No Ingredients** *Sergiu Ivanov*
11:45 – 12:10	**P Systems with Toxic Objects** *Artiom Alhazov and Rudolf Freund*
12:10 – 12:35	**Promoters and Inhibitors in Purely Catalytic P Systems** *Artiom Alhazov, Rudolf Freund and Sergey Verlan*
12:35 – 13:00	**Causal Nets for Geometrical Gandy-Paun-Rozenberg Machines** *Adam Obtulowicz*
13:00 – 14:30	Lunch – Hotel Restaurant Il Giardino
	Chair: Gheorghe Păun
14:30 – 15:30	**P systems: A Formal Approach to Social Networks** *Erzsébet Csuhaj-Varjú (with Marian Gheorghe and György Vaszil)*
15:30 – 15:55	**Extended Simulation and Verication Platform for Kernel P Systems** *Mehmet E. Bakir, Florentin Ipate, Savas Konur, Laurentiu Mierla and Ionut Mihai Niculescu*
15:55 – 16:25	Coffee Break
16:25 – 16:50	**Length P Systems with a Lonesome Traveler** *Artiom Alhazov, Rudolf Freund and Sergiu Ivanov*
16:50 – 17:15	**P Systems with Anti-Matter** *Artiom Alhazov, Bogdan Aman and Rudolf Freund*
17:15 – 17:40	**A Short Note on Red-Green P Automata** *Bogdan Aman, Erzsébet Csuhaj-Varjú and Rudolf Freund*
17:40 – 18:15	**Informal talks and discussions** *Adam Obtulowicz, Petr Sosík*
18:15 – 19:00	Steering Committee Meeting

Thursday, August 21, 2014

	Chair: Mario J. Pérez-Jiménez
09:00 – 10:00	**From P Colonies to 2D P Colonies and to Simulations of Multiagent Systems** *Luděk Cienciala*
10:00 – 10:25	**The Abilities of P Colony Based Models in Robot Control** *Luděk Cienciala, Lucie Ciencialová, Miroslav Langer and Michal Perdek*
10:25 – 10:50	**Expressing Workflow and Workflow Enactment using P Systems** *Rohit Verma, Tanveer Ahmed and Abhishek Srivastava*
10:50 – 11:20	**Coffee Break**
11:20 – 11:45	**Membrane Computing Inspired Approach for Executing Scientific Workflow in the Cloud** *Tanveer Ahmed, Rohit Verma and Abhishek Srivastava*
11:45 – 12:10	**Fault Diagnosis Models for Electric Locomotive Systems Based on Fuzzy Reasoning Spiking Neural P Systems** *Tao Wang, Gexiang Zhang and Mario J. Pérez-Jiménez*
12:10 – 12:35	**Priorities, Promoters and Inhibitors in Deterministic Non-Cooperative P Systems** *Artiom Alhazov and Rudolf Freund*
12:35 – 12:55	**Presentation of CMC16** *José M. Sempere Luna*
12:55 – 13:15	**Informal talks and discussions** *Alberto Leporati*
13:15 – 14:45	**Lunch – Hotel Restaurant Il Giardino**
15:00 	Meeting Point: Main NH Hotel Reception Visit of Prague Castle - Boat Trip on Vltava River - Conference Dinner at Kamenný Most Restaurant (by Charles Bridge), Smetanovo nábřeží 195, Prague 1 - Staré Město

Friday, August 22, 2014

	Chair: Alica Kelemenová
09:00 – 10:00	**A Bioinspired Computing Approach to Model Complex Systems** *Mario J. Pérez-Jiménez*

Time	Session
10:00 – 10:25	**Probabilistic Guarded P systems, a New Formal Modelling Framework** *Manuel García-Quismondo, Miguel Á. Martínez-Del-Amor and Mario J. Pérez-Jiménez*
10:25 – 10:50	**P System Computational Model as Framework for Hybrid (Membrane-Quantum) Computations** *Yurii Rogozhin, Artiom Alhazov, Liudmila Burtseva, Svetlana Cojocaru, Alexander Colesnicov and Ludmila Malahov*
10:50 – 11:20	**Coffee Break**
11:20 – 11:45	**Categorised Counting Mediated by Blotting Membrane Systems for Particle-based Data Mining and Numerical Algorithms** *Thomas Hinze, Konrad Grützmann, Benny Höckner, Peter Sauer and Sikander Hayat*
11:45 – 12:10	**Spiking Neural P Systems with Cooperating Rules** *Padma Metta, Srinivasan Raghuraman and Kamala Krithivasan*
12:10 – 12:25	**Notes on Spiking Neural P Systems with Structural Plasticity Computing Morphisms** *Francis George Cabarle and Henry Adorna*
12:25 – 12:50	**Simulating Elementary Active Membranes, with an Application to the P Conjecture** *Alberto Leporati, Luca Manzoni, Giancarlo Mauri, Antonio E. Porreca and Claudio Zandron*
12:50 – 13:05	**Graph Cluster Analysis by Lattice Based P System with Conditional Rules** *Jie Xue and Xiyu Liu*
13:05 – 14:30	**Lunch – Hotel Restaurant Il Giardino**
	Chair: Rudolf Freund
14:30 – 15:30	**Inconspicuous Appeal of Amorphous Computing Systems** *Jiří Wiedermann*
15:30 – 15:55	**Parallel Thinning with Complex Objects and Actors** *Radu Nicolescu*
15:55 – 16:25	**Coffee Break**
16:25 – 16:50	**Solving the ST-Connectivity Problem with Pure Membrane Computing Techniques** *Zsolt Gazdag and Miguel A. Gutiérrez-Naranjo*
16:50 – 17:05	**On the Dynamics of P Systems Based on Membrane Boundaries** *Tamás Mihálydeák and Zoltán Ernő Csajbók*
17:05 – 17:40	**Informal talks and discussions** *Geixang Zhang, Sergiu Ivanov*
17:40 – 18:00	**Best Paper Award, Closing**