CMC₁₇

17th International Conference on Membrane Computing



Conference program

Monday, 25th of July – (Building U6, floor -1, near to Aula Martini U6-04)

8:30 - 9:30: Registration

9:30 – 9:45: Opening Speech – Claudio Zandron, Chair of the CMC Steering Committee

Presentations of research groups - Session Chair: Claudio Zandron

9:45 – 10:30: Presentations of research groups

10:30 - 11:00: Coffee break

11:00 – 12:30: Presentations of research groups

12:30 - 14:00: Lunch

14:00 – 15:30: *Presentations of research groups*

15:30 - 16:00: Coffee break

16:00 – 17:30: Presentations of research groups

18:00 - 19:30: Welcome cocktail

Tuesday, 26th of July – (Building U6, floor -1, Aula Martini U6-04)

9:30 – 9:45: Opening Speech – Alberto Leporati, Claudio Zandron, *Chairs of CMC 17 Organizing Committee*

9:45 – 10:15: Gheorghe Păun, Obituary for Solomon Marcus

10:15 - 10:45: Coffee break

Session Chair: TBA

10:45 – 11:10: Bogdan Aman, Gabriel Ciobanu, Computational Power of Protein Networks

11:10 – 11:35: Gabriel Ciobanu, Eneia Nicolae Todoran, *Continuation Passing Semantics for Membrane Systems*

11:35 – 12:00: Lucie Ciencialová, Luděk Cienciala, Petr Sosík, P Colonies with evolving environment

12:00 – 12:15: Erzsébet Csuhaj-Varjú, Extensions of P Colonies

12:15 – 12:30: Ákos Balaskó, Erzsébet Csuhaj-Varjú, *Traces of Computations by Generalized Communicating P Systems*

12:30 - 14:00: Lunch

Session Chair: TBA

14:00 – 15:00: Thomas Hinze (Invited Talk)

Coping with Dynamical Structures for Useful Applications of Membrane Computing

15:00 – 15:25: Artiom Alhazov, Omar Belingheri, Rudolf Freund, Sergiu Ivanov, Antonio E. Porreca, Claudio Zandron, *Purely Catalytic P Systems over Integers and Their Generative Power*

15:25 – 15:50: Artiom Alhazov, Omar Belingheri, Rudolf Freund, Sergiu Ivanov, Antonio E. Porreca, Claudio Zandron, Semilinear Sets, Register Machines, and Integer Vector Addition (P)

Systems

15:50 - 16:20: Coffee break

Session Chair: TBA

16:20 – 16:45: Artiom Alhazov, Bogdan Aman, Rudolf Freund, Sergiu Ivanov, Simulating R Systems by P Systems

16:45 – 17:10: Artiom Alhazov, Rudolf Freund and Sergey Verlan, *Maximal Variants of the Set Derivation Mode*

17:10 – 17:25: Giuditta Franco, On minimal multiset grammars

17:25 – 17:40: José M. Sempere, A characterization of symport/antiport P systems through Information Theory

17:40 – 18:10: Steering Committee Meeting

18:10 – ??: **Meeting of the IMCS**

Wednesday, 27th of July – (Building U6, floor -1, Aula Martini U6-04)

Session Chair: TBA

9:30 - 10:30: Paolo Milazzo (Invited Talk)

Applications of P systems in population biology and ecology

10:30 - 11:00: Coffee break

Session Chair: TBA

11:00 – 11:25: Thomas Hinze, Lea Louise Weber, Uwe Hatnik, Walking Membranes: Grid-exploring

P Systems with Artificial Evolution for Multi-purpose Topological Optimisation of Cascaded

Processes

11:25 – 11:50: Radu Nicolescu, Data Structures with cP Systems or Byzantine Succintly

11:50 – 12:15: Andrei George Florea, Cătălin Buiu, Secure dispersion of robots in a swarm using P colonies

12:15 – 12:30: Kang Huang, Transmission Line Fault Classification Based on Fuzzy Reasoning Spiking Neural P Systems

12:30 - 14:00: Lunch

15:00 - ??: Social events: tour in Milano + social dinner

Thursday, 28th of July – (Building U6, floor -1, Aula Martini U6-04)

Session Chair: TBA

9:30 – 10:30: Agustín Riscos-Núñez (Invited Talk)

Borderlines of efficiency: what's up?

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

Session Chair: TBA

11:00 – 11:25: Zsolt Gazdag, Gábor Kolonits, Remarks on the Computational Power of Some Restricted Variants of P Systems with Active Membranes

11:25 – 11:50: Alberto Leporati, Luca Manzoni, Giancarlo Mauri, Antonio E. Porreca, Claudio Zandron, *Shallow Non-Confluent P Systems*

11:50 – 12:15: Linqiang Pan, Bosheng Song, K.G. Subramanian, *Rewriting P Systems with Flat- splicing Rules*

12:15 – 12:30: Péter Battyányi, György Vaszil, Chemical Term Reduction with Active P Systems

12:30 - 14:00: Lunch

Session Chair: TBA

14:00 – 15:00: Matteo Cavaliere (Invited Talk)

Eco-Evo Dynamics and the Role of Cellular Computing

15:00 – 15:25: Mehmet Emin Bakir, Marian Gheorghe, Savas Konur, Mike Stannett, *Comparative Analysis of Statistical Model Checking Tools*

15:25 – 15:50: Marian Gheorghe, Rodica Ceterchi, Florentin Ipate, Savas Konur, *Kernel P Systems Modelling, Testing and Verification - Sorting Case Study*

15:50 - 16:20: **Coffee break**

16:20 – 16:45: Raluca Lefticaru, Luis Felipe Macías-Ramos, Ionuţ Mihai Niculescu, Laurenţiu Mierlă, Agent-Based Simulation of Kernel P Systems with Division Rules Using FLAME

16:45 – 17:00: Kristóf Kántor, György Vaszil, Recent Results and Problems Concerning P Colony Automata

17:00 - 17:15: Best paper award

17:15 - 17:30: Springer prize

17:30 - 17:45: Closing

Friday, 29th of July – (Building U6, floor -1, Aula Martini U6-04)

Interaction Day – Session Chair: TBA

9:30 – 10:30: Results obtained during the Conference + Joint Work

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

Interaction Day – Session Chair: TBA

11:00 – 12:30: Results obtained during the Conference + Joint Work

12:30 - 12:45: Closing