

# CMC18

## 18th International Conference on Membrane Computing

24-28 July, 2017, Bradford, UK



# Program

Tuesday, 25th July

08:00 – 09:00	Registration
09:00 – 09:30	Opening session – Marian Gheorghe
	<i>Chair: TBD</i>
09:30 – 10:30	Erzsébet Csuha-Varjú (Invited talk) <i>Simple and Small: On Two Concepts in P Systems Theory</i>
10:30 – 11:00	Coffee/Tea break
11:00 – 11:25	José M. Sempere, <i>Families of Languages Encoded by SN P Systems</i>
11:25 – 11:50	Florin-Daniel Bîlbîe, Andrei Păun, <i>Universality of Spiking Neural P Systems with Communication on Request Using One Type of Spike</i>
11:50 – 12:15	Lucie Cencialová, Luděk Cenciala, Erzsébet Csuha-Varjú, <i>APCol Systems with Teams</i>
12:15 – 12:40	Radu Nicolescu, <i>A Literate Programming Pearl in cP Systems</i>
12:40 – 13:05	Thomas Hinze, Benjamin Förster, <i>Event-based Life in a Nutshell:</i>

	<i>How Evaluation of Individual Life Cycles Can Reveal Statistical Inferences using Action-accumulating P Systems</i>
<b>13:05 – 14:00</b>	<b>Lunch break &amp; demos</b>
	<b>Chair: TBD</b>
14:30 – 14:55	Kristóf Kántor, György Vaszil, <i>Generalized P Colony Automata and Their Relation to P Automata</i>
<b>14:55 – 15:25</b>	<b>Coffee/Tea Break</b>
15:25 – 15:50	Ren Tristan de la Cruz, Francis George Cabarle, Xiangxiang Zeng, <i>On Languages Generated by Spiking Neural P System with Structural Plasticity</i>
15:50 – 16:15	Linqiang Pan, Bosheng Song, Gexiang Zhang, <i>Tissue P Systems with Rule Production/Removal</i>
16:15 – 16:40	Richelle Ann Juayong, Nestine Hope Hernandez, Francis George Cabarle, Henry Adorna, Kelvin Buño, <i>On Evolution-Communication P systems with Energy Having Bounded and Unbounded Communication</i>
16:40 – 17:05	Bogdan Aman, Gabriel Ciobanu, <i>Reversibility in Bio-Inspired Systems</i>
<b>17:05 – 19:00</b>	<b>IMCS assembly</b>

## Wednesday, 26th July

	<b>Chair: TBD</b>
<b>09:00 – 10:00</b>	<b>Harold Fellermann (Invited talk)</b> <i>Toward Programmable Biology: Techniques for Computing in and with Cells</i>
10:00 – 10:25	G. Michele Pinna, <i>Reversing Steps in Membrane Systems Computations</i>
<b>10:25 – 10:55</b>	<b>Coffee/Tea break</b>
10:55 – 11:20	Roberto Barbuti, Roberta Gori, Paolo Milazzo, <i>Multiset Patterns and their Application to Dynamic Causalities in Membrane Systems</i>
11:20 – 11:45	Raluca Lefticaru, Mehmet Emin Bakir, Savas Konur, Mike Stannett, Florentin Ipate, <i>Modelling and Validating an Engineering Application in Kernel P Systems</i>
11:45 – 12:10	Luis Valencia-Cabrera, David Orellana-Martín, Agustín Riscos-Núñez, Mario J. Pérez-Jiménez, <i>Counting Membrane Systems</i>
<b>12:15 – 13:30</b>	<b>Lunch</b>
<b>13:45 –</b> 	<b>Trip to Saltaire</b>
<b>19:00 –</b>	<b>Conference dinner</b>

Thursday, 27th July

	<b>Chair: TBD</b>
09:00 – 10:00	<b>Maciej Koutny (Invited talk)</b> <i>Petri Net Based Synthesis of Tissue Systems</i>
10:00 – 10:25	Erzsébet Csuhaaj-Varjú, Sergey Verlan, <i>Bi-simulation Between P Colonies and P Systems with Multi-stable Catalysts</i>
10:25 – 10:55	<b>Coffee/Tea break</b>
10:55 – 11:20	Petr Sosík, Vladimír Smolka, Jan Drastík, Jaroslav Bradík, Max Garzon, <i>On the Robust Power of Morphogenetic Systems for Time Bounded Computation</i>
11:20 – 11:45	Artiom Alhazov, Rudolf Freund, Sergiu Ivanov, <i>Communication P Systems with Randomized Rule Right-hand Sides</i>
11:45 – 12:10	Alberto Leporati, Luca Manzoni, Giancarlo Mauri, Antonio E. Porreca, Claudio Zandron, <i>Solving a Special Case of the P Conjecture Using Dependency Graphs with Dissolution</i>
12:10 – 12:35	Henry Adorna, Artiom Alhazov, Linqiang Pan, Bosheng Song, <i>Simulating Evolutional Symport/Antiport by Evolution-Communication and vice versa in Tissue P Systems with Parallel Communication</i>
12:35 – 13:00	Nestine Hope Hernandez, Henry Adorna, <i>A Simulation of Transition P Systems in Numerical P Systems with Migrating Variables</i>
13:00 – 14:30	<b>Lunch &amp; posters</b>
	<b>Chair: TBD</b>
14:30 – 14:55	Kelvin Buño, Henry Adorna, Linqiang Pan, Bosheng Song, <i>Communication Complexity of Distributed Tissue-like P Systems for Solving SAT Problem</i>
14:55 – 15:25	<b>Coffee/Tea break</b>
15:25 – 16:25	<b>Michael Fessing (Invited talk)</b> <i>Epigenetic Regulation of Gene Expression in Health and Disease</i>
16:25 – 16:50	Ivan Cedric Macababayao, Erika Mika Amores, Nestine Hope Hernandez, Francis George Cabarle, <i>Deterministic and Uniform Solutions to NP-Complete Problems using Numerical P Systems with Lower Thresholds</i>
16:50 – 17:15	Xiyu Liu, Yuzhen Zhao, Wenping Wang, Wenxing Sun, <i>An Improved Partitioning Around Medoids Algorithm Based on Time-Free Cell-Like P Systems with Multi-Promoters and Multi-Inhibitors</i>
17:15 – 17:40	Ping Guo, Yunlei Dai, <i>A P System for Travelling Salesman Problem</i>
17:50 – 18:05	CMC19 presentation
18:05 – 18:40	<b>Awards</b>
18:40 – 18:50	Closing ceremony

Friday, 28th July

09:00 – 10:25	Interactions
10:25 – 10:55	Coffee/Tea break
10:55 – 13:00	Interactions

## Venue

The conference will be hosted by [DHEZ \(Digital Health Enterprise Zone\)](#), conveniently located in the centre of Bradford, 34 Peckover St, BD1 5BD.

