



MATHEMATICAL INSTITUTE
SLOVAK ACADEMY OF SCIENCES



NCMA 2018

10th International Workshop on Non-Classical Models of Automata and Applications
Košice, Slovakia, August 21-22, 2018

Program of the workshop

Monday, August 20

18:00 - 20:00	registration and welcome reception in Hotel TeleDom
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Tuesday, August 21

08:30 - 09:00	registration
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Session Chair: Giovanni Pighizzini

09:00 - 10:00	On nondeterministic two-way transducers	Bruno Guillon
10:00 - 10:30	On regular expressions with backreferences and transducers	Martin Berglund, Frank Drewes, Brink van der Merwe
10:30 - 11:00	coffee break	

Session Chair: Dana Pardubská

11:00 - 11:30	Characterizations of LRR-languages by correctness-preserving computations	František Mráz , Friedrich Otto, Martin Plátek
11:30 - 12:00	Jumping restarting automata	Qichao Wang , Yongming Li
12:00 - 14:00	lunch break	

Session Chair: György Vaszil

14:00 - 14:30	One-way topological automata and the tantalizing effects of their topological features	Tomoyuki Yamakami
14:30 - 15:00	Forbidden patterns for ordered automata	Ondřej Klíma , Libor Polák
15:00 - 15:15	Extended finite automata and decision problems for matrix semigroups	Özlem Salehi , Ahmet Celal Cem Say
15:15 - 15:40	business meeting	
15:40 - 16:00	coffee break	
16:30 - 18:00	guided tour in the city center	
19:00	dinner	



Wednesday, August 22

08:30 - 09:00	Registration
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Session Chair: Michal Hospodár

09:00 - 10:00	On the application of Watson-Crick finite automata for the resolution of bioinformatic problems	José Sempere
10:00 - 10:30	A jumping 5'→3' Watson-Crick finite automata model	Radim Kocman , Benedek Nagy, Zbyněk Křivka, Alexander Meduna
10:30 - 11:00	coffee break	

Session Chair: František Mráz

11:00 - 11:30	Networks of evolutionary processors with resources restricted filters	Bianca Truthe
11:30 - 11:45	Parsing languages of P colony automata	Erzsébet Csuha-Varjú, Kristóf Kántor, György Vaszil
11:45 - 12:00	Nondeterministic complexity of power and positive closure on subclasses of convex languages	Michal Hospodár , Matúš Palmovský
12:00 - 14:00	lunch break	

Session Chair: Bianca Truthe

14:00 - 14:30	Causal dynamics of discrete manifolds	Pablo Arrighi, Clément Chouteau, Stefano Facchini , Simon Martiel
14:30 - 15:00	Postselecting probabilistic finite state recognizers and verifiers	Maksims Dimitrijevs , Abuzer Yakaryilmaz
15:00 - 15:15	Recognition of uncountably many languages with one counter	Maksims Dimitrijevs , Abuzer Yakaryilmaz
15:15 - 15:45	coffee break	

Session Chair: Galina Jirásková

15:45 - 16:15	Automata that may change their mind	Markus Holzer , Martin Kutrib
16:15 - 16:45	Two-sided locally testable languages	Martin Kutrib, Friedrich Otto
16:45 - 17:00	Complexity of languages resulting from the cut operation in the unary case	Markus Holzer, Michal Hospodár
17:00	closing of NCMA 2018	