DCFS 2018 SCHEDULE Minor change made on July 4;

Invited talks are allocated 50 min for presentation and 10 min for questions. Regular talks are allocated 20 min for presentation and 5 min for questions.

WEDNESDAY JULY 25

- 0815-0900 Registration
- 0900-0915 Opening
- 0915-1015 Peter Selinger (invited)

Efficient synthesis of quantum circuits by number-theoretic methods (*No knowledge of quantum computing or number theory will be assumed*)

- 1015-1045 BREAK
- 1045-1200 Markus Holzer and Simon Wolfsteiner.

On the Grammatical Complexity of Finite Languages

Sylvie Davies.

A New Technique for Reachability of States in Concatenation Automata **Chris Keeler and Kai Salomaa**.

Cycle Height of Finite Automata

- 1200-1400 LUNCH
- 1400-1515 Stefan Hetzl and Simon Wolfsteiner.

Cover Complexity of Finite Languages

Galina Jirásková and Alexander Okhotin.

State complexity of unambiguous operations on deterministic finite automata Janusz Brzozowski and Sylvie Davies.

Most Complex Deterministic Union-Free Regular Languages

1515-1545 BREAK

1545-1700 Martin Kutrib, Andreas Malcher and Christian Schneider.

Finite Automata with Undirected State Graphs

Bruno Guillon and Luca Prigioniero.

Linear-Time Limited Automata

Tomoyuki Yamakami.

State Complexity Characterizations of Parameterized Degree-Bounded Graph Connectivity, Sub-Linear Space Computation, and the Linear Space Hypothesis

1700-1800 BUSINESS MEETING

THURSDAY JULY 26

0900-1000 Jacques Sakarovitch (invited)

The Complexity of Carry Propagation for Successor Functions

- 1000-1030 BREAK
- 1030-1145 Oscar Ibarra and Ian McQuillan.

State Grammars with Stores

Alexander Okhotin and Kai Salomaa.

Further closure properties of input-driven pushdown automata

Simon Beier and Markus Holzer.

Properties of Right One-Way Jumping Finite Automata

1200-1400 LUNCH

1400-2100 SOCIAL EVENT: excursion to Lunenburg (a UNESCO World Heritage Site); dinner at Le Bistro, Halifax

FRIDAY JULY 27

0900-1000 Ludwig Staiger (invited)

Finite Automata and Randomness

- 1000-1030 BREAK
- 1030-1210 **Miguel Ferreira, Nelma Moreira and Rogério Reis**. Forward Injective Finite Automata: Exact and Random Generation of Nonisomorphic NFAs

Enrico Formenti and Paolo Massazza.

On the generation of 2-polyominoes

Da-Jung Cho, Yo-Sub Han, Kai Salomaa and Taylor Smith.

Site-Directed Insertion: Decision Problems, Maximality and Minimality

Louis-Marie Dando and Sylvain Lombardy.

Two-way automata over locally finite semirings

- 1210-1400 LUNCH
- 1400-1545 Honouring the late **Maurice Nivat**: talk by **Jacques Sakarovitch**

Tara Brough.

Word Problem Languages for Free Inverse Monoids

Rishat Ibrahimov, Kamil Khadiev, Krišjānis Prūsis and Abuzer Yakaryilmaz. Error-Free Affine, Unitary, and Probabilistic OBDDs

Massimiliano Goldwurm, Jianyi Lin and Marco Vignati.

- A local limit property for pattern statistics in bicomponent stochastic models
- 1545-1630 BREAK