

The Eighth International Conference on Developments in Language Theory (DLT'04)

Massey University at Albany
The CDMTCS at the University of Auckland

13–17 December 2004, Massey University at Albany
Auckland, New Zealand

Welcome and Registration:

18:00–20:30 Sunday welcome and early registration

8:00–12:00 Monday registration

Monday morning session:

9:00–9:30 Conference Opening

Invited talk:

9:30–10:30 **Bruno Courcelle.** Recognizable Sets of Graphs, Hypergraphs and Relational Structures: A Survey

10:30–11:00 *Tea break*

Invited talk:

11:00–12:00 **Rodney G. Downey.** Some New Directions and Questions in Parameterized Complexity

12:00–14:00 *Lunch break*

Monday afternoon session:

Contributed talk:

14:00–14:30 **Marcella Anselmo, Dora Giammarresi and Maria Madonia.** Regular Expressions for Two-dimensional Languages over One-Letter Alphabet

Contributed talk:

14:30–15:00 **Bernd Borchert, Klaus-Jörn Lange, Frank Stephan, Pascal Tesson and Denis Thérien.** The Dot-Depth and the Polynomial Hierarchy Correspond on the Delta Levels

Contributed talk:

15:00–15:30 **Christian Choffrut, Massimiliano Goldwurm and Violetta Lonati.** On the Maximum Coefficients of Rational Formal Series in Commuting Variables

15:30–16:00 *Tea break*

Contributed talk:

16:00–16:30 **Martin Kutrib, Andreas Malcher and Detlef Wotschke.** The Boolean Closure of Linear Context-Free Languages

Contributed talk:

16:30–17:00 **Stephen R. Lakin and Richard M. Thomas.** Context-Sensitive Decision Problems in Groups

Poster talk:

17:00–17:30 **Jiri Wiedermann.** Self-reproduction by Self-assembly and Fission

Poster talk:

17:30–18:00 **Benedek Nagy.** A Normal Form for Regular Expressions

Poster talk:

18:00–18:30 **Manfred Kudlek and Roxana Melinte.** On Black Hole Languages

Tuesday morning session:

Contributed talk:

9:00–9:30 **Rudolf Freund.** P Systems Working in the Sequential Mode on Arrays and Strings

Contributed talk:

9:30–10:00 **Shunsuke Inenaga, Ayumi Shinohara and Masayuki Takeda.** An Efficient Pattern Matching Algorithm on a Subclass of Context Free Grammars

Contributed talk:

10:00–10:30 **Bianca Truthe.** A Method for Deciding the Finiteness of Deterministic Tabled Picture Languages

10:30–11:00 *Tea break*

Contributed talk:

11:00–11:30 **Sergey Verlan.** Tissue P Systems with Minimal Symport/Antiport

Contributed talk:

11:30–12:00 **Daniel Reidenbach.** On the Equivalence Problem for E-pattern Languages over Small Alphabets

12:00–14:00 *Lunch break*

Tuesday afternoon session:

Contributed talk:

14:00–14:30 **Mark Daley and Michael Domaratzki.** On Codes Defined by Bio-Operations

Contributed talk:

14:30–15:00 **Chloé Rispal and Olivier Carton.** Complementation of Rational Sets on Countable Scattered Linear Orderings

Contributed talk:

15:00–15:30 **Michael Domaratzki.** Semantic Shuffle on and Deletion along Trajectories

15:30–16:00 *Tea break*

Contributed talk:

16:00–16:30 **Ludwig Staiger.** On the Hausdorff Measure of ω -power Languages

Poster talk:

16:30–17:00 **Liliana Cojocaru.** Communication Complexity Classes for Distributed Generation of Languages

Poster talk:

17:00–17:30 **Sergey Afonin, Elena Hazova, Alexander Shundeev.** On Regular Language Factorisation: a Complete Solution for Unary Case

Poster talk:

17:00–17:30 **Gerhard Lischke.** Restoration of Punctured Languages

Poster talk:

17:30–18:00 **Sándor Horváth and Manfred Kudlek.** A Full Range of Continuum Many Non-context-free Languages with Strong Iteration

Wednesday morning session:

Contributed talk:

9:00–9:30 **Flavio D’Alessandro and Stefano Varricchio.** Avoidable Sets and Well Quasi-Orders

Contributed talk:

9:30–10:00 **T. Jurdziński, F. Otto, F. Mráz and M. Plátek.** On the Complexity of 2-Monotone Restarting Automata

Contributed talk:

10:00–10:30 **Jürgen Dassow.** A Ciliate Bio-Operation and Language Families

10:30–11:00 *Tea break*

Invited talk:

11:00–12:00 **Grzegorz Rozenberg.** Computation in Living Cells: The Quest for Discovery of Biological Hardware

Contributed talk:

12:00–12:30 **Igor Potapov.** From Post Systems to the Reachability Problems for Matrix Semigroups and Multicounter Automata

Wednesday afternoon session:

17:00–23:00 Cruise and Dinner with 67ft Catamaran

Thursday morning session:

Contributed talk:

9:00–9:30 **Henning Bordihn, Markus Holzer and Martin Kutrib.** Input Reversals and Iterated Pushdown Automata: A New Characterization of Khabbaz Geometric Hierarchy of Languages

Contributed talk:

9:30–10:00 **Jozef Gruska, Salvatore La Torre and Mimmo Parente.** Optimal Time & Communication Solutions of Firing Squad Synchronization Problems on Square Arrays, Toruses and Rings

Contributed talk:

10:00–10:30 **Narad Rampersad.** Words Avoiding $\frac{7}{3}$ -Powers and the Thue–Morse Morphism

10:30–11:00 *Tea break*

Invited talk:

11:00–12:00 **Nataša Jonoska.** Algebraic and Topological Models for DNA Recombinant Processes

Thursday afternoon:

14:30–22:00 Tour and Vineyard Dinner

Friday morning session:

Contributed talk:

9:00–9:30 **Oscar H. Ibarra, Hsu-Chun Yen and Zhe Dang.** The Power of Maximal Parallelism in P Systems

Contributed talk:

9:30–10:00 **Maurice H. ter Beek, Erzsébet Csuhaj-Varjú, Markus Holzer and György Vaszil.** On Competence in CD Grammar Systems

Contributed talk:

10:00–10:30 **Oleksiy Kurganskyy and Igor Potapov.** On the Computation Power of Finite Automata in Two-dimensional Environments

10:30–11:00 *Tea break*

Invited talk:

11:00–12:00 **Anca Muscholl.** A Kleene Theorem for a Class of Communicating Automata with Effective Algorithms

12:00–14:00 *Lunch break*

Friday afternoon session:

Contributed talk:

14:00–14:30 **T. Jurdziński, F. Otto, F. Mráz and M. Plátek.** On Left-Monotone Deterministic Restarting Automata

Contributed talk:

14:30–15:00 **Dietrich Kuske and Peter Weigel.** The Role of the Complementarity Relation in Watson-Crick Automata and Sticker Systems

Contributed talk:

15:00–15:30 **Markus Lohrey.** Decidability and Complexity in Automatic Monoids

15:30–16.:00 *Tea break*

Contributed talk:

16:00–16:30 **Chiara Epifanio, Filippo Mignosi, Jeffrey Shallit and Ilaria Venturini.** Sturmian Graphs and a Conjecture of Moser

Contributed talk:

16:30–17:00 **Andreas Maletti.** Relating Tree Series Transducers and Weighted Tree Automata

Contributed talk:

17:00–17:30 **Anca Muscholl and Igor Walukiewicz.** An NP-Complete Fragment of LTL

17:30–18:00 Closing Meeting

Proposed List of Session Chairs (16, in session order)

Michael Dinneen
Bakh Khoussainov
Maurice Margenstern
Masami Ito
Jiri Wiedermann
Rudolf Freund
Hossein Sarrafzadeh
Markus Holzer
Ludwig Staiger
Elena Calude
Jürgen Dassow
Oscar Ibarra
David Parsons
Manfred Kudlek
Robert McKibbin
Heath James