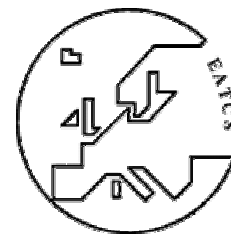




# 9th International Conference DEVELOPMENTS IN LANGUAGE THEORY



July 4-8, 2005 - Hotel La Torre, Mondello  
Palermo, ITALY

## Monday, July 4<sup>th</sup> - Welcome and Registration

17:30 Registration.

19:00 Welcome Cocktail.

## Tuesday, July 5<sup>th</sup>

08:45 Conference Opening.

09:00-10:00 **Invited lecture:**

**Central Sturmiian Words: Recent Developments.**  
*Arturo Carpi, Aldo de Luca.*

10:00-10:30 **Selected Contributions:**

- **Bidimensional Sturmiian Sequences and Substitutions.**  
*Thomas Fernique.*

10:30-11:00 Coffee Break.

11:00-12:30 **Selected Contributions:**

- **Sturmiian words: dynamical systems and derivated words.**  
*Isabel M. Araújo and Véronique Bruyère.*
- **On Hairpin-Free Words and Languages.**  
*L. Kari, S. Konstantinidis, P. Sosík, G. Thierrin.*
- **On the Frequency of Letters in Pure Binary Morphic Sequences.**  
*Kalle Saari.*

12:30-15:00 Lunch Break.

15:00-16:00 **Invited lecture:**

**Codes in Symbolic Systems.**  
*Marie-Pierre Béal, Dominique Perrin.*

16:00-16:30 **Selected Contributions:**

- **A Kleene Theorem for Languages of Words Indexed by Linear Orderings.**  
*Alexis Bès and Olivier Carton.*

16:30-17:00 Coffee Break.

17:00-18:30 **Selected Contributions:**

- **Schützenberger and Eilenberg theorems for words on linear orderings.**  
*Nicolas Bedon and Chloé Rispal.*
- **The inclusion problem for unambiguous rational trace languages.**  
*Paolo Massazza.*
- **LR parsing for Boolean grammars.**  
*Alexander Okhotin.*

## Wednesday, July 6<sup>th</sup>

09:00-10:00 **Invited lecture:**

**Inexpressibility Results for Regular Languages in Nonregular Settings.**  
*Howard Straubing.*

10:00-10:30 **Selected Contributions:**

- **Membership and finiteness problems for recognizable subsets of regular languages.**  
*Sergey Afonin and Elena Hazova.*

10:30-11:00 Coffee Break.

11:00-12:30 **Selected Contributions:**

- **On Language Inequalities  $XK \subseteq LX$ .**  
*Michal Kunc.*
- **On the Reachability of Invertible Diagonal Matrices.**  
*Paul Bell and Igor Potapov.*
- **Polynomial Generators of Recursively Enumerable Languages.**  
*Juha Kortelainen.*

12:30-15:00 Lunch Break.

15:00-16:00 **Invited lecture:**

**Restricted towers of Hanoi and morphisms.**  
*Jean-Paul Allouche and Amir Sapir.*

16:00-16:30 **Selected Contributions:**

- **Voronoi cells of beta-integers.**  
*Avi Elkharrat and Christiane Frougny.*

16:30-17:00 Coffee Break.

17:00-18:30 **Selected Contributions:**

- **The Power of Tree Series Transducers of Type I and II.**  
*Andreas Maletti.*
- **Unambiguous Morphic Images of Strings.**  
*Dominik D. Freydenberger, Daniel Reidenbach, Johannes C. Schneider.*
- **A note on a result of Daurat and Nivat.**  
*Srečko Brlek, Gilbert Labelle, Annie Lacasse.*

## Thursday, July 7<sup>th</sup>

09:00-10:00 **Invited lecture:**

**Locally Consistent Parsing and Applications to Approximate String Comparisons.**  
*Tuğkan Batu and Cenk Sahinalp.*

10:00-10:30 **Selected Contributions:**

- **Languages with mismatches and an application to approximate indexing.**  
*C. Epifanio, A. Gabriele and F. Mignosi.*

10:30-11:00 Coffee Break.

11:00-13:00 **Selected Contributions:**

- **Complementing Two-Way Finite Automata.**  
*Viliam Geffert, Carlo Mereghetti, Giovanni Pighizzini.*

- **Monotone Deterministic RL-Automata Don't Need Auxiliary Symbols.**  
*T. Jurdzinski, F. Mráz, F. Otto, M. Plátek.*
- **Adding Monotonic Counters to Automata and Transition Graphs.**  
*Wong Karianto.*
- **Revolving-Input Finite Automata.**  
*Henning Bordihn, Markus Holzer, Martin Kutrib.*

13:00-15:00 Lunch Break.

15:00-23:00 Social tour and dinner.

## Friday, July 8<sup>th</sup>

09:00-10:00 **Invited lecture:**

**Collapsing Words: A Progress Report.**  
*D.S. Ananichev, I.V. Petrov and Michael V. Volkov.*

10:00-10:30 **Selected Contributions:**

- **On palindromic factors of billiard words.**  
*J-P. Borel and C. Reutenauer.*

10:30-11:00 Coffee Break.

11:00-12:30 **Selected Contributions:**

- **Palindromes in Sturmian Words.**  
*Aldo de Luca and Alessandro De Luca.*
- **The Mortality Threshold for Partially Monotonic Automata.**  
*D. S. Ananichev.*
- **On Some Properties of the Language of 2-Collapsing Words.**  
*E. V. Pribavkina.*

12:30-15:00 Lunch Break.

15:00-16:00 **Invited lecture:**

**Reversible cellular automata.**  
*Jarkko Kari.*

16:00-16:30 **Selected Contributions:**

- **Complexity of Quantum Uniform and Nonuniform Automata.**  
*Farid Ablyayev, Aida Gainutdinova.*

16:30-17:00 Coffee Break.

17:00-18:30 **Selected Contributions:**

- **On Timed Automata with Discrete Time--Structural and Language Theoretical Characterization.**  
*H. Gruber, M. Holzer, A. Kiehn and B. König.*
- **Tissue P Systems with Antiport Rules and Small Numbers of Symbols and Cells.**  
*Artiom Alhazov, Rudolf Freund, Marion Oswald.*
- **Semi-Rational Sets of DAGs.**  
*Lutz Priese.*