

12:45 – 13:00	Break
13:00 – 14:00 <i>Henning Bordihn</i>	SERGEY KITAEV, TOUFIK MANSOUR and PATRICE SÉÉBOLD: <i>Counting Ordered Patterns in Words Generated by Morphisms</i> SVETLANA PUZYNINA: <i>On Periodicity of Generalized Two-dimensional Words</i>
14:00 – 16:00	Lunch
16:00 – 17:30 <i>Martin Kutrib</i>	RYO YOSHINAKA: <i>An Efficient Algorithm for the Inclusion Problem of a Subclass of DPDAs</i> GIUSI CASTIGLIONE, ANTONIO RESTIVO AND MARINELLA SCIORTINO: <i>Hopcroft's Algorithm and Cyclic Automata</i> CLAUDE KIRCHNER, RADU KOPETZ and PIERRE-ETIENNE MOREAU: <i>Anti-Pattern Matching Modulo</i>
17:30 – 18:00	Coffee Break
18:00 – 19:00 <i>Jörg Flum</i>	BENJAMIN STEINBERG: <i>Marked Products of Languages and Matrix Representations</i> – Invited Talk

### Wednesday, March 19

9:15 – 10:45 <i>Jorge Almeida</i>	MIKHAIL VOLKOV: <i>Synchronizing Automata (III)</i> – Tutorial
10:45 – 11:15	Coffee Break
11:15 – 12:15 <i>Bianca Truthe</i>	TERRY ANDERSON, NARAD RAMPERSAD, NICOLAE SANTEAN and JEFFREY SHALLIT: <i>Finite Automata, Palindromes, Powers, and Patterns</i> DOROTHEA BAUMEISTER and JÖRG ROTHE: <i>The Three-Color and Two-Color Tantrix<sup>(TM)</sup> Rotation Puzzle Problems Are NP-Complete via Parsimonious Reductions</i>
12:15 – 12:30	Break
12:30 – 13:30 <i>Remco Loos</i>	MARK MERCER: <i>Lower Bounds for Generalized Quantum Finite Automata</i> HOLGER PETERSEN: <i>Sorting and Element Distinctness on One-Way Turing Machines</i>
13:30	Closing

We acknowledge the support by:



## 2<sup>nd</sup> International Conference on Language and Automata Theory and Applications

LATA 2008, March 13 - 19, 2008

Tarragona, Spain

Programme



### Thursday, March 13

8:00 – 9:00	Registration
9:00 – 9:15	Opening
9:15 – 10:45 <i>Zoltán Ésik</i>	JARKKO KARI: <i>Cellular Automata (I)</i> – Tutorial
10:45 – 11:15	Coffee Break
11:15 – 12:45 <i>Volker Diekert</i>	ARTO SALOMAA, KAI SALOMAA and SHENG YU: <i>Length Codes, Products of Languages and Primality</i> MATHIEU GIRAUD: <i>Not So Many Runs in Strings</i> WŁODZIMIERZ MOCZURAD and MAŁGORZATA MOCZURAD: <i>How Many Figure Sets Are Codes?</i>
12:45 – 13:00	Break
13:00 – 14:00 <i>Martin Plátek</i>	JAN-HENRIK ALTENBERND: <i>On Bifix Systems and Generalizations</i> MARTIN KORP and AART MIDDELDORP: <i>Match-Bounds with Dependency Pairs for Proving Termination of Rewrite Systems</i>
14:00 – 16:00	Lunch
16:00 – 17:30 <i>Stefano Crespi Reghizzi</i>	ALEXANDER KRASSOVITSKIY, YURII ROGOZHIN and SERGEY VERLAN: <i>Further Results on Insertion-Deletion Systems with One-sided Contexts</i> PETER LEUPOLD: <i>On Regularity-Preservation by String-Rewriting Systems</i> FRIEDRICH OTTO and MARTIN PLÁTEK: <i>A Two-Dimensional Taxonomy of Proper Languages of Lexicalized FRR-Automata</i>
17:30 – 18:00	Coffee Break
18:00 – 19:30 <i>Sheng Yu</i>	FRIEDRICH OTTO and ETSURO MORIYA: <i>On Alternating Non-Context-Free Grammars</i> JÜRGEN DASSOW and SHERZOD TURAEV: <i>k-Petri Net Controlled Grammars</i> ALEXANDER PEREKRESTENKO: <i>Minimalist Grammars with Unbounded Scrambling and Nondiscriminating Barriers Are NP-hard</i>

<b>Friday, March 14</b>	
8:45 – 10:15 <i>Zoltán Ésik</i>	JARKKO KARI: <i>Cellular Automata (II) – Tutorial</i>
10:15 – 10:45	Coffee Break
10:45 – 12:15 <i>Jarkko Kari</i>	PABLO ARRIGHI, VINCENT NESME and REINHARD WERNER: <i>One-dimensional Quantum Cellular Automata over Finite, Unbounded Configurations</i>
	DAMIEN REGNAULT, NICOLAS SCHABANEL and ERIC THIERRY: <i>On the Analysis of ‘Simple’ 2D Stochastic Cellular Automata</i>
	SILVIO CAPOBIANCO: <i>Induced Subshifts and Cellular Automata</i>
12:15 – 12:30	Break
12:30 – 14:00 <i>Holger Petersen</i>	LAURA KALLMEYER and YANNICK PARMENTIER: <i>On the Relation between Multicomponent Tree Adjoining Grammars with Tree Tuples (TT-MCTAG) and Range Concatenation Grammars (RCG)</i>
	LE HONG PHUONG, AZIM ROUSSANALY, THI MINH HUYEN NGUYEN and TUONG VINH HO: <i>A Hybrid Approach to Word Segmentation of Vietnamese Texts</i>
	DENIS BECHET, ALEXANDER DIKOVSKY, ANNIE FORET and EMMANUELLE GAREL: <i>Optional and Iterated Types for Pregroup Grammars</i>
14:00 – 16:00	Lunch
16:00 – 17:30 <i>Mikołaj Bojanczyk</i>	ANDREAS MALETTI: <i>Minimizing Deterministic Weighted Tree Automata</i>
	JÉRÔME CHAMPAVÈRE, RÉMI GILLERON, AURÉLIEN LEMAY and JOACHIM NIEHREN: <i>Efficient Inclusion Checking for Deterministic Tree Automata and DTDs</i>
	ARTIOM ALHAZOV, ERZSÉBET CSUHAJ-VARJÚ, CARLOS MARTÍN-VIDE and YURII ROGOZHIN: <i>About Universal Hybrid Networks of Evolutionary Processors of Small Size</i>
17:30 – 18:00	Coffee Break
18:00 – 19:00 <i>Friedrich Otto</i>	MIKOLAJ BOJANCZYK: <i>Tree-walking Automata – Invited Talk</i>
19:30	Visit to the Old City

### Saturday, March 15

10:00 – 13:30	Diploma Estudis Avançats (DEA Exams for both PhD schools <i>Formal Languages and Applications</i> and <i>Language and Speech Technologies</i> )
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<b>Sunday, March 16</b>	
10:00 – 18:00	Conference Trip with Calçotada

### Monday, March 17

9:15 – 10:45 <i>Jorge Almeida</i>	MIKHAIL VOLKOV: <i>Synchronizing Automata (I) – Tutorial</i>
10:45 – 11:15	Coffee Break
11:15 – 12:45 <i>Mikhail Volkov</i>	HENNING BORDIHN and MARKUS HOLZER: <i>Random Context in Regulated Rewriting Versus Cooperating Distributed Grammar Systems</i>
	SUNA BENSCH, HENNING BORDIHN, MARKUS HOLZER and MARTIN KUTRIB: <i>Deterministic Input-Reversal and Input-Revolving Finite Automata</i>
	PAWEŁ GAWRYCHOWSKI and ANDRZEJ KISIELEWICZ: <i>2-Synchronizing Words</i>
12:45 – 13:00	Break
13:00 – 14:00 <i>Yurii Rogozhin</i>	STEFANO CRESPI REGHIZZI and PIERLUIGI SAN PIETRO: <i>Consensual Definition of Languages by Regular Sets</i>
	BARBARA KLUNDER: <i>Characterization of Star-Connected Languages Using Finite Automata</i>
14:00 – 16:00	Lunch
16:00 – 17:30 <i>Michael Domaratzki</i>	ROBERT BRIJDER and HENDRIK JAN HOOGEBOOM: <i>Extending the Overlap Graph for Gene Assembly in Ciliates</i>
	FLORENT BECKER: <i>Transformations and Preservation of Self-assembly Dynamics through Homotheties</i>
	OZAN KAHRAMANOGULLARI: <i>On Linear Logic Planning and Concurrency</i>
17:30 – 18:00	Coffee Break
18:00 – 19:00 <i>Markus Holzer</i>	MICHAEL DOMARATZKI: <i>Formal Language Tools for Template-guided DNA Recombination – Invited Talk</i>
19:30	Visit to the City Hall

### Tuesday, March 18

9:15 – 10:45 <i>Jorge Almeida</i>	MIKHAIL VOLKOV: <i>Synchronizing Automata (II) – Tutorial</i>
10:45 – 11:15	Coffee Break
11:15 – 12:45 <i>Benjamin Steinberg</i>	ELAINE RENDER and MARK KAMBITES: <i>Polycyclic and Bicyclic Valence Automata</i>
	ALAN J. CAIN, GRAHAM P. OLIVER, NIK RUSKUC and RICK THOMAS: <i>Automatic Presentations for Cancellative Semigroups</i>
	ONDREJ KLIMA and LIBOR POLÁK: <i>Literal Varieties of Languages Induced by Homomorphisms onto Nilpotent Groups</i>