Final Call for Papers

6th INTERNATIONAL CONFERENCE ON LANGUAGE AND AUTOMATA THEORY AND APPLICATIONS

LATA 2012

A Coruña, Spain

March 5 - 9, 2012

http://grammars.grlmc.com/LATA2012/

AIMS:

LATA is a yearly conference in theoretical computer science and its applications. Following the tradition of the International Schools in Formal Languages and Applications developed at Rovira i Virgili University in Tarragona since 2002, LATA 2012 will reserve significant room for young scholars at the beginning of their career. It will aim at attracting contributions from both classical theory fields and application areas (bioinformatics, systems biology, language technology, artificial intelligence, etc.).

VENUE:

LATA 2012 will take place in A Coruña, at the northwest of Spain. The venue will be the Faculty of Computer Science, University of A Coruña.

SCOPE:

Topics of either theoretical or applied interest include, but are not limited to:

- algebraic language theory
- algorithms for semi-structured data mining
- algorithms on automata and words
- automata and logic
- automata for system analysis and programme verification
- automata, concurrency and Petri nets
- automatic structures
- cellular automata
- combinatorics on words
- computability
- computational complexity
- computational linguistics
- data and image compression
- decidability questions on words and languages
- descriptional complexity
- DNA and other models of bio-inspired computing
- document engineering
- foundations of finite state technology

- foundations of XML
- fuzzy and rough languages
- grammars (Chomsky hierarchy, contextual, multidimensional, unification, categorial, etc.)
- grammars and automata architectures
- grammatical inference and algorithmic learning
- graphs and graph transformation
- language varieties and semigroups
- language-based cryptography
- language-theoretic foundations of artificial intelligence and artificial life
- parallel and regulated rewriting
- parsing
- pattern recognition
- patterns and codes
- power series
- quantum, chemical and optical computing
- semantics
- string and combinatorial issues in computational biology and bioinformatics
- string processing algorithms
- symbolic dynamics
- symbolic neural networks
- term rewriting
- transducers
- trees, tree languages and tree automata
- weighted automata

STRUCTURE:

LATA 2012 will consist of:

- 3 invited talks
- 2 invited tutorials
- peer-reviewed contributions

INVITED SPEAKERS:

Eugene Asarin (Paris 7), Measuring Information in Timed Languages Bernard Boigelot (Liège), Automata-based Symbolic Representation of Polyhedra Gilles Dowek (INRIA), tutorial, Around the Physical Church Thesis: Cellular Automata, Graphs, Formal Languages and Quantum Theory Rodney Downey (Wellington), tutorial, 20 Years of Parameterized Complexity Jack Lutz (Iowa State), to be announced

PROGRAMME COMMITTEE:

Eric Allender (Rutgers) Miguel Á. Alonso (A Coruña) Amihood Amir (Bar-Ilan) Dana Angluin (Yale) Franz Baader (Dresden) Patricia Bouyer (Cachan) John Case (Delaware) Volker Diekert (Stuttgart) Paul Gastin (Cachan) Reiko Heckel (Leicester) Sanjay Jain (Singapore) Janusz Kacprzyk (Warsaw) Victor Khomenko (Newcastle) Bakhadyr Khoussainov (Auckland) Claude Kirchner (Paris) Maciej Koutny (Newcastle) Gregory Kucherov (Marne-la-Vallée) Salvador Lucas (Valencia) Sebastian Maneth (Sydney) Carlos Martín-Vide (Tarragona, chair) Giancarlo Mauri (Milano Bicocca) Aart Middeldorp (Innsbruck) Faron Moller (Swansea) Angelo Montanari (Udine) Joachim Niehren (Lille) Mitsunori Ogihara (Miami) Enno Ohlebusch (Ulm) Dominique Perrin (Marne-la-Vallée) Alberto Policriti (Udine) Alexander Rabinovich (Tel Aviv) Mathieu Raffinot (Paris) Jörg Rothe (Düsseldorf) Olivier H. Roux (Nantes) Yasubumi Sakakibara (Keio) Eljas Soisalon-Soininen (Aalto) Frank Stephan (Singapore) Jens Stoye (Bielefeld) Howard Straubing (Boston) Masayuki Takeda (Kyushu) Wolfgang Thomas (Aachen) Sophie Tison (Lille) Jacobo Torán (Ulm) Tayssir Touili (Paris) Esko Ukkonen (Helsinki) Frits Vaandrager (Nijmegen) Manuel Vilares (Vigo) Todd Wareham (Newfoundland) Pierre Wolper (Liège) Hans Zantema (Eindhoven) Thomas Zeugmann (Sapporo)

ORGANIZING COMMITTEE:

Miguel Á. Alonso (A Coruña, co-chair) Adrian Horia Dediu (Tarragona) Carlos Gómez Rodríguez (A Coruña) Jorge Graña (A Coruña) Carlos Martín-Vide (Tarragona, co-chair) Bianca Truthe (Magdeburg) Jesús Vilares (A Coruña) Florentina Lilica Voicu (Tarragona)

SUBMISSIONS:

Authors are invited to submit papers presenting original and unpublished research. Papers should not exceed 12 single-spaced pages (including eventual appendices) and should be formatted according to the standard format for Springer Verlag's LNCS series (see

http://www.springer.com/computer/lncs/lncs+authors?SGWID=0-40209-0-0-0). Submissions have to be uploaded at:

http://www.easychair.org/conferences/?conf=lata2012

PUBLICATIONS:

A volume of proceedings published by Springer in the LNCS series will be available by the time of the conference.

A special issue of a major journal will be later published containing peer-reviewed extended versions of some of the papers contributed to the conference. Submissions to it will be by invitation.

REGISTRATION:

The period for registration will be open since July 16, 2011 until March 5, 2012. The registration form can be found at the website of the conference: <u>http://grammars.grlmc.com/LATA2012/</u>

Early registration fees: 500 Euro Early registration fees (PhD students): 400 Euro Late registration fees: 540 Euro Late registration fees (PhD students): 440 Euro On-site registration fees: 580 Euro On-site registration fees (PhD students): 480 Euro

At least one author per paper should register. Papers that do not have a registered author who paid the fees by December 5, 2011 will be excluded from the proceedings.

Fees comprise access to all sessions, one copy of the proceedings volume, coffee breaks and lunches. PhD students will need to prove their status on site.

PAYMENT:

Early (resp. late) registration fees must be paid by bank transfer before December 5, 2011 (resp. February 24, 2012) to the conference series account at Uno-e Bank (Julián Camarillo 4 C, 28037 Madrid, Spain):

IBAN: ES3902270001820201823142 – Swift/BIC code: UNOEESM1 (account holder: Carlos Martin-Vide – LATA 2012; account holder's address: Av. Catalunya, 35, 43002 Tarragona, Spain).

Please write the participant's name in the subject of the bank form. Transfers should not involve any expense for the conference. People claiming early registration will be requested to prove that they gave the bank transfer order by the deadline.

On-site registration fees can be paid only in cash. A receipt for payments will be provided on site.

Besides paying the registration fees, it is required to fill in the registration form at the website of the conference.

IMPORTANT DATES:

Paper submission: October 7, 2011 (23:59h, CET) Notification of paper acceptance or rejection: November 18, 2011 Final version of the paper for the LNCS proceedings: November 27, 2011 Early registration: December 5, 2011 Late registration: February 24, 2012 Starting of the conference: March 5, 2012 Submission to the post-conference special issue: June 9, 2012

FURTHER INFORMATION:

florentinalilica.voicu@urv.cat

POSTAL ADDRESS:

LATA 2012 Research Group on Mathematical Linguistics Rovira i Virgili University Av. Catalunya, 35 43002 Tarragona, Spain Phone: +34-977-559543 Fax: +34-977-558386