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***** SUBMISSION DEADLINE EXTENDED: October 21 *****
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# 8th INTERNATIONAL CONFERENCE ON LANGUAGE AND AUTOMATA THEORY AND APPLICATIONS

### **LATA 2014**

Madrid, Spain

March 10-14, 2014

Organized by:

Research Group on Implementation of Language-Driven Software and Applications (ILSA)

Complutense University of Madrid

Research Group on Mathematical Linguistics (GRLMC)
Rovira i Virgili University

# AIMS:

LATA is a yearly conference on theoretical computer science and its applications. Following the tradition of the diverse PhD training events in the field developed at Rovira i Virgili University in Tarragona since 2002, LATA 2014 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, language technology, artificial intelligence, etc.).

#### **VENUE:**

LATA 2014 will take place in Madrid, the capital of Spain. The venue will be the School of Informatics of Complutense University.

#### 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

codes

combinatorics on words

compilers

computability

computational complexity

data and image compression

decidability issues on words and languages

descriptional complexity

DNA and other models of bio-inspired computing

digital libraries and document engineering

foundations of finite state technology

foundations of XML

fuzzy and rough languages

grammars (Chomsky hierarchy, contextual, unification, categorial, etc.)

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

natural language and speech automatic processing

parallel and regulated rewriting

parsing

patterns

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 2014 will consist of:

invited talks invited tutorials

peer-reviewed contributions

# **INVITED SPEAKERS:**

Javier Esparza (Munich Tech, DE), On Trees and Fixed Point Equations (tutorial) Leslie A. Goldberg (Oxford, UK), The Complexity of Approximate Counting Oscar H. Ibarra (Santa Barbara, US), Some Computability and Complexity Problems Concerning FAs, PDAs, and Counter Machines

Sanjeev Khanna (Philadelphia, US), Matchings, Random Walks, and Sampling Helmut Seidl (Munich Tech, DE), Interprocedural Information Flow Analysis of XML Processors

#### PROGRAMME COMMITTEE:

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Michael Rusinowitch (LORIA, Nancy, FR)

Yasubumi Sakakibara (Keio, JP)

Davide Sangiorgi (Bologna, IT)

Colin Stirling (Edinburgh, UK)

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Rob van Glabbeek (NICTA, Sydney, AU)

Helmut Veith (Vienna Tech, AT)

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Ana Fernández-Pampillón (Madrid)
Carlos Martín-Vide (Tarragona, co-chair)
Antonio Sarasa (Madrid)
José-Luis Sierra (Madrid, co-chair)
Bianca Truthe (Magdeburg)
Florentina Lilica Voicu (Tarragona)

#### **SUBMISSIONS:**

Authors are invited to submit non-anonymized papers in English 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 <a href="http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0">http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0</a>).

Submissions have to be uploaded to:

https://www.easychair.org/conferences/?conf=lata2014

### **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 is open from July 15, 2013 to March 10, 2014. The registration form can be found at:

http://grammars.grlmc.com/lata2014/Registration.php

## **DEADLINES:**

Paper submission: October 21, 2013 (23:59 CET) – EXTENDED – Notification of paper acceptance or rejection: November 25, 2013 Final version of the paper for the LNCS proceedings: December 2, 2013

Early registration: December 9, 2013 Late registration: February 24, 2014 Starting of the conference: March 10, 2014 End of the conference: March 14, 2014

Submission to the post-conference journal special issue: June 14, 2014

## **QUESTIONS AND FURTHER INFORMATION:**

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#### **POSTAL ADDRESS:**

**LATA 2014** 

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# **ACKNOWLEDGEMENTS:**

Departament d'Economia i Coneixement, Generalitat de Catalunya Universidad Complutense de Madrid Universitat Rovira i Virgili