## Last Call for Papers

# 4th INTERNATIONAL CONFERENCE ON LANGUAGE AND AUTOMATA THEORY AND APPLICATIONS (LATA 2010)

**Trier, Germany, May 24-28, 2010** 

http://grammars.grlmc.com/LATA2010/

Deadline: December 3
Please notice that the deadline is firm and will not be extended!

## AIMS:

LATA is a yearly conference in theoretical computer science and its applications. As linked to the International PhD School in Formal Languages and Applications that was developed at Rovira i Virgili University (the host of the previous three editions and co-organizer of this one) in the period 2002-2006, LATA 2010 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.).

#### SCOPE:

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

- algebraic language theory
- algorithms on automata and words
- automata and logic
- automata for system analysis and programme verification
- automata, concurrency and Petri nets
- cellular automata
- combinatorics on words
- computability
- computational complexity
- computer 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
- 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
- neural networks
- parallel and regulated rewriting
- parsing
- pattern matching and pattern recognition

- patterns and codes
- power series
- quantum, chemical and optical computing
- semantics
- string and combinatorial issues in computational biology and bioinformatics
- symbolic dynamics
- term rewriting
- text algorithms
- text retrieval
- transducers
- trees, tree languages and tree machines
- weighted machines

#### STRUCTURE:

#### LATA 2010 will consist of:

- 4 invited talks
- refereed contributions
- open sessions for discussion in specific subfields, on open problems, or on professional issues (if requested by the participants)

# **INVITED SPEAKERS:**

John Brzozowski (Waterloo), Complexity in Convex Languages Alexander Clark (London), Three Learnable Models for the Description of Language Borivoj Melichar (Prague), Arbology: Trees and Pushdown Automata Anca Muscholl (Bordeaux), Communicating Automata

## **PROGRAMME COMMITTEE:**

Alberto Apostolico (Atlanta)

Thomas Bäck (Leiden)

Stefania Bandini (Milano)

Wolfgang Banzhaf (St. John's)

Henning Bordihn (Potsdam)

Kwang-Moo Choe (Daejeon)

Andrea Corradini (Pisa)

Christophe Costa Florencio (Leuven)

Maxime Crochemore (Marne-la-Vallée)

W. Bruce Croft (Amherst)

Erzsébet Csuhaj-Varjú (Budapest)

Jürgen Dassow (Magdeburg)

Volker Diekert (Stuttgart)

Rodney G. Downey (Wellington)

Frank Drewes (Umea)

Henning Fernau (Trier, co-chair)

Rusins Freivalds (Riga)

Rudolf Freund (Wien)

Paul Gastin (Cachan)

Edwin Hancock (York, UK)

Markus Holzer (Giessen)

Helmut Jürgensen (London, Canada)

Juhani Karhumäki (Turku)

Efim Kinber (Fairfield)

Claude Kirchner (Bordeaux)

Brian Marcus (Vancouver)

Carlos Martín-Vide (Brussels, co-chair)

Risto Miikkulainen (Austin)

Victor Mitrana (Bucharest)

Claudio Moraga (Mieres)

Sven Naumann (Trier)

Chrystopher Nehaniv (Hatfield)

Maurice Nivat (Paris)

Friedrich Otto (Kassel)

Daniel Reidenbach (Loughborough)

Klaus Reinhardt (Tübingen)

Antonio Restivo (Palermo)

Christophe Reutenauer (Montréal)

Kai Salomaa (Kingston, Canada)

Jeffrey Shallit (Waterloo)

Eljas Soisalon-Soininen (Helsinki)

Bernhard Steffen (Dortmund)

Frank Stephan (Singapore)

Wolfgang Thomas (Aachen)

Marc Tommasi (Lille)

Esko Ukkonen (Helsinki)

Todd Wareham (St. John's)

Osamu Watanabe (Tokyo)

Bruce Watson (Pretoria)

Thomas Wilke (Kiel)

Slawomir Zadrozny (Warsaw)

Binhai Zhu (Bozeman)

## **ORGANIZING COMMITTEE:**

Adrian Horia Dediu (Tarragona)

Henning Fernau (Trier, co-chair)

Maria Gindorf (Trier)

Stefan Gulan (Trier)

Anna Kasprzik (Trier)

Carlos Martín-Vide (Brussels, co-chair)

Norbert Müller (Trier)

Bianca Truthe (Magdeburg)

## **SUBMISSIONS:**

Authors are invited to submit papers presenting original and unpublished research. Papers should not exceed 12 single-spaced pages 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=lata2010

### **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 the Journal of Computer and System Sciences (Elsevier) will be later published containing refereed extended versions of some of the papers contributed to the conference. Submissions to it will be only by invitation.

A special issue of another major journal containing papers oriented to applications is under consideration.

## **REGISTRATION:**

The period for registration will be open since September 1, 2009 until May 24, 2010. The registration form can be found at the website of the conference: http://grammars.grlmc.com/LATA2010/

Early registration fees: 500 Euro

Early registration fees (PhD students): 400 Euro

Late registration fees: 530 Euro

Late registration fees (PhD students): 430 Euro

On-site registration fees: 550 Euro

On-site registration fees (PhD students): 450 Euro

At least one author per paper should register. Papers that do not have a registered author who paid the fees by February 15, 2010 will be excluded from the proceedings.

Fees comprise access to all sessions, one copy of the proceedings volume, coffee breaks, lunches, excursion, and conference dinner.

#### **PAYMENT:**

Early (resp. late) registration fees must be paid by bank transfer before February 15, 2010 (resp. May 14, 2010) to the conference series account at Caixa d'Estalvis de Tarragona (Plaza Imperial Tarraco 6, 43005 Tarragona, Spain): IBAN: ES7920730074350111026852 - Swift code: CECAESMM073(account holder: Carlos Martin-Vide & URV - LATA 2010; address of the account holder: Avenida 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.

On-site registration fees can be paid only in cash.

A receipt for the payment 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.

## **BEST PAPER AWARDS:**

An award will be offered to the authors of the two best papers accepted to the conference. Only papers fully authored by PhD students are eligible. The award intends to cover their travel expenses.

## **IMPORTANT DATES:**

Paper submission: December 3, 2009\*

Notification of paper acceptance or rejection: January 21, 2010

Final version of the paper for the LNCS proceedings: February 8, 2010

Early registration: February 15, 2010 Late registration: May 14, 2010

Starting of the conference: May 24, 2010

Submission to the post-conference special issue(s): August 27, 2010

\*Contributors who have submitted by the deadline will be allowed to upload an updated version until December 10.

# **FURTHER INFORMATION:**

gindorf-ti@informatik.uni-trier.de

# CONTACT:

LATA 2010 Universität Trier Fachbereich IV – Informatik Campus II, Behringstraße D-54286 Trier

Phone: +49-(0)651-201-2836 Fax: +49-(0)651-201-3954