

6th INTERNATIONAL PhD SCHOOL IN FORMAL LANGUAGES AND APPLICATIONS 2006-2008

Rovira i Virgili University
Research Group on Mathematical Linguistics
Tarragona, Spain

<http://www.grlmc.com>

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COURSES AND PROFESSORS 1st TERM (MARCH–JULY 2007)

Languages	Alexander Okhotin (Turku)
Combinatorics on Words	Tero Harju (Turku)
Regular Grammars	Masami Ito (Kyoto)
Context-Free Grammars	Manfred Kudlek (Hamburg)
Context-Sensitive Grammars	Victor Mitrana (Tarragona)
Mildly Context-Sensitive Grammars	Henning Bordihn (Potsdam)
Finite Automata	Sheng Yu (London ON)
Pushdown Automata	Hendrik Jan Hoogeboom (Leiden)
Turing Machines	Holger Petersen (Stuttgart)
Varieties of Formal Languages	Jean-Éric Pin (Paris)
Semigroups for the Working Theoretical Computer Scientist	Stuart Margolis (Ramat Gan)
Computational Complexity	Markus Holzer (Munich)
Descriptive Complexity of Automata and Grammars	Detlef Wotschke (Frankfurt)
Communication Complexity	Carsten Damm (Göttingen)
Patterns	Kai Salomaa (Kingston ON)
Infinite Words	Juhani Karhumäki (Turku)
Partial Words	Francine Blanchet-Sadri (Greensboro NC)
Two-Dimensional Languages	Kenichi Morita (Hiroshima)
Grammars with Regulated Rewriting	Jürgen Dassow (Magdeburg)
Contextual Grammars	Carlos Martín-Vide (Tarragona)
Parallel Grammars	Henning Fernau (Trier)
Grammar Systems	Erzsébet Csuhaj-Varjú (Budapest)
Automata Networks	Pál Dömösi (Debrecen)
Tree Automata and Tree Languages	Magnus Steinby (Turku)
Tree Adjoining Grammars	James Rogers (Richmond IN)
Term Rewriting Systems	Nachum Dershowitz (Tel Aviv)
Automata and Logic	Franz Baader (Dresden)
Formal Languages and Concurrent Systems	Jetty Kleijn (Leiden)
Petri Net Theory and Its Applications	Hsu-Chun Yen (Taipei)
Graph Grammars and Graph Transformation	Hans-Jörg Kreowski (Bremen)
Restarting Automata	Friedrich Otto (Kassel)

COURSES AND PROFESSORS 2nd TERM (SEPTEMBER–DECEMBER 2007)

Parameterized Complexity	Jörg Flum (Freiburg, Germany)
Modern Complexity Theory	Mitsunori Ogiwara (Rochester NY)
Fuzzy Formal Languages	Claudio Moraga (Dortmund)
Cellular Automata	Martin Kutrib (Giessen)
DNA Computing: Theory and Experiments	Natasha Jonoska (Tampa FL)
Splicing Systems	Paola Bonizzoni (Milan)
Aqueous Computing	Tom Head (Binghamton NY)
Biomolecular Nanotechnology	Max Garzon (Memphis TN)
Quantum Automata	Jozef Gruska (Brno)
Symbolic Dynamics and Automata	Christiane Frougny (Paris)
Unification Grammars	Shuly Wintner (Haifa)
Context-Free Grammar Parsing	Giorgio Satta (Padua)
Probabilistic Parsing	Mark-Jan Nederhof (Groningen)
Categorical Grammars	Michael Moortgat (Utrecht)
Grammatical Inference	Colin de la Higuera (Saint-Étienne)
Mathematical Foundations of Learning Theory	Satoshi Kobayashi (Tokyo)
Natural Language Processing with Symbolic Neural Networks	Risto Miikkulainen (Austin TX)
Weighted Automata	Manfred Droste (Leipzig)
Finite Transducers	Jacques Sakarovitch (Paris)
Sequential Pattern Matching	Thierry Lecroq (Rouen)
Mathematical Evolutionary Genomics	David Sankoff (Ottawa ON)
Cryptography	Valtteri Niemi (Nokia, Helsinki)
String Complexity	Lucian Ilie (London ON)
Data Compression	Wojciech Rytter (Warsaw)
Image Compression	Jarkko Kari (Turku)
Algebraic Techniques in Language Theory	Zoltán Ésik (Tarragona)
Topics in Asynchronous Circuit Theory	John Brzozowski (Waterloo ON)
Automata for Verification	Moshe Vardi (Houston TX)

STUDENTS:

Candidate students for the programme are welcome from around the world. Most appropriate degrees include: Computer Science and Mathematics. Other students (for instance, from Linguistics, Logic or Engineering) could be accepted provided they have a good undergraduate background in discrete mathematics. At the beginning of the first term, a few lessons on discrete mathematics advanced pre-requisites will be offered, in order to homogenize the students' mathematical background.

In order to check eligibility for the programme, the student must be certain that the highest university degree s/he got enables her/him to be enrolled in a doctoral programme in her/his home country.

TUITION FEES:

2,120 euros in total, approximately.

DISSERTATION:

After following the courses, the students enrolled in the programme will have to defend a research project and, later, a dissertation in English in their own area of interest, in order to get the so-called European PhD degree (which is a standard PhD degree with an additional mark of quality). All the professors in the programme will be allowed to supervise students' dissertations, as well as any other well-reputed scientist at the discretion of the host institute.

FUNDING:

The university will cover the tuition fees and full-board accommodation expenses of all admitted students during the first term. For the second one, funding opportunities will be provided, among others by the Spanish Ministry for Education and Science, the Spanish Ministry for Foreign Affairs and Cooperation (Becas MAEC-AECI), and the European Commission (Alban scheme for Latin American citizens).

Immediately after the courses and during the writing of the PhD dissertation, some of the best students will be offered 4-year research fellowships, which will allow them to work in the framework of the host institute.

PRE-REGISTRATION PROCEDURE:

In order to pre-register, one should post (not fax, not e-mail) to the programme chairman:

- a xerocopy of the main page of the passport,
- a xerocopy of the university education diplomas,
- a xerocopy of the academic transcripts,
- full CV,
- letters of recommendation (optional),
- any other document to prove background, interest and motivation (optional).

SCHEDULE:

Announcement of the programme:	August 8, 2006
Pre-registration deadline:	October 15, 2006
Selection of students:	October 22, 2006
Starting of the 1st term:	March 5, 2007
End of the 1st term:	July 27, 2007
Starting of the 2nd term (tentative):	September 3, 2007
End of the 2nd term (tentative):	December 21, 2007
Defense of the research project (tentative):	September 13, 2008
DEA examination (tentative):	May 16, 2009

QUESTIONS AND FURTHER INFORMATION:

Contact the programme chairman, Carlos Martín-Vide, at carlos.martin@urv.cat

POSTAL ADDRESS:

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