

## Call for Papers

### **Mini-conference on Applied Theoretical Computer Science (MATCOS)**

Koper, Slovenia, October 13<sup>th</sup> and 14<sup>th</sup>, 2010.

<http://matcos.pint.upr.si>

**Held in conjunction with the 13th Multi-Conference on Information Society, October 11-15, 2010, Ljubljana, Slovenia. (<http://is.ijs.si>)**

#### **Scope and Topics**

During the past years, several subjects, methods and approaches of Theoretical Computer Science have been used by other fields, and several results have been integrated into real world applications. Some examples for the above nature are practical solutions for NP-hard problems, algorithmics oriented AI and data mining solutions, new models and methods in system biology and bioinformatics, automata theory solutions in software and hardware verification, prospective new models of computation and future computer architecture.

The scope of the conference is to collect ideas and solutions from the field of Theoretical Computer Science which can be directly applied in other fields or being potential to be integrated in real world applications.

Suggested, but not exclusive, topics of interest include:

- automata and formal languages, computability
- algorithms and data structures
- computational complexity
- artificial intelligence, machine learning
- optimization, approximation methods, NP-hard problems
- graph theory

Special emphasis on use in applications such as simulation, Bioinformatics, Digital signal and image processing, logistics etc.

#### **Program Committee**

Andrej Brodnik (Ljubljana, Koper, Slovenia), co-chair

Gábor Galambos (Szeged, Hungary), co-chair

Gabriel Istrate (Timisoara, Romania)

Miklós Krész (Szeged, Hungary)

Gerhard Reinelt (Heidelberg, Germany)

Borut Robič, (Ljubljana, Slovenia)

Magnus Steinby (Turku, Finland)

Borut Žalik (Maribor, Slovenia)

#### **Keynote speaker**

András Recski (Budapest, Hungary)

#### **Paper submission**

Papers presenting original research in conference topics are being sought. Papers must be in English and provide sufficient details to allow the program committee to assess their merits. Submissions, as well as final versions, are limited to 4 pages sharp and will be published in an Information Society multiconference proceedings. Revised versions of selected full papers will appear in a special issue of the journal Informatica ([www.informatica.si](http://www.informatica.si)). The instructions and the format for preparing the papers can be downloaded from:

<http://matcos.pint.upr.si/>

Only electronic submissions will be accepted (in pdf format), via

<http://www.easychair.org/conferences/?conf=matcos10>

or by email ([matcos@upr.si](mailto:matcos@upr.si)) with the subject "MATCOS submission".

#### **Important dates**

Paper submission (extended): 11th of July, 2010.

Notification: 27th of August, 2010.

#### **Website and Contacts**

More detailed on-line information is displayed at <http://matcos.pint.upr.si>

Personal inquires should be sent to

[matcos@upr.si](mailto:matcos@upr.si)

**Organized by Primorska Institute of Natural Sciences and Technology**