



# TERMGRAPH 2007

4th International Workshop on Computing with Terms and Graphs

A satellite event of ETAPS 31 March - Braga, Portugal

## Call for Papers TERMGRAPH 2007

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31 March 2007, Braga, Portugal

The advantage of computing with graphs rather than terms is that common subexpressions can be shared, improving the efficiency of computations in space and time. Sharing is ubiquitous in implementations of programming languages: many functional, logic, object-oriented and concurrent calculi are implemented using term graphs. Research in term and graph rewriting ranges from theoretical questions to practical implementation issues. Different research areas include: the modelling of first- and higher-order term rewriting by (acyclic or cyclic) graph rewriting, the use of graphical frameworks such as interaction nets and sharing graphs (optimal reduction), rewrite calculi for the semantics and analysis of functional programs, graph reduction implementations of programming languages, graphical calculi modelling concurrent and mobile computations, object-oriented systems, graphs as a model of biological or chemical abstract machines, and automated reasoning and symbolic computation systems working on shared structures.

The aim of this workshop is to bring together researchers working in these different domains and to foster their interaction, to provide a forum for presenting new ideas and work in progress, and to enable newcomers to learn about current activities in term and graph rewriting. TERMGRAPH 2007 will be a one-day satellite event of ETAPS 2007, which will take place in Braga, Portugal. The first TERMGRAPH workshop took place in Barcelona in 2002, the second in Rome in 2004, and the third in Vienna in 2006.

### Topics

Topics of interest include all aspects of term graphs and sharing of common subexpressions in rewriting, programming, automated reasoning and symbolic computation. This includes (but is not limited to): term rewriting, graph transformation, programming languages, models of computation, graph-based languages, semantics and implementation of programming languages, compiler construction, pattern recognition, databases, bioinformatics, and system descriptions.

**Invited Speaker:** To be announced.

### Submissions and Publication

Authors are invited to submit either a short paper (5-7 pages) or a complete paper (12 pages) by e-mail to [mackie@lix.polytechnique.fr](mailto:mackie@lix.polytechnique.fr) by 29 December, 2006. Preliminary proceedings will be available at the workshop. Submissions should be in PostScript or PDF format, using ENTCS style files.

### Important Dates

Submission deadline: 29 December, 2006

Notification: 1 February, 2007

Pre-proceedings version due: 9 March, 2007

Workshop: 31 March, 2007

Submission deadline for ENTCS: 15 June, 2007. Notification: 14 September, 2007. Final Versions: 12 October, 2007.

### Programme Committee

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