

# Fifth International Workshop on Reduction Strategies in Rewriting and Programming (WRS'05)

part of the Federated conferences on Rewriting, Deduction and Programming (RDP 2005)  
Nara, Japan, April 22nd, 2005

## CALL FOR PAPERS AND PARTICIPATION

### Workshop co-chairs:

Roberto Di Cosmo (Paris 7, France)  
Yoshihito Toyama (Tohoku, Japan)

### Program committee:

Sergio Antoy (Portland)  
Eduardo Bonelli (Stevens)  
Roberto Di Cosmo (Paris 7)  
Bernhard Gramlich (Wien)  
Stefano Guerrini (Roma)  
Salvador Lucas (Valencia)  
Aart Middeldorp (Innsbruck)  
Yoshihito Toyama (Tohoku)

### Invited speakers:

Kokichi Futatsugi (JAIST, Japan)  
Hongwei Xi (Boston, USA)

### Important dates:

January 21, 2005 Abstracts  
January 31, 2005 Submission  
February 25, 2005 Notification  
March 18, 2005 Final version  
April 22, 2005 Workshop

### Topics of interest

 include, but are not restricted to:

- theoretical foundations for the definition and semantic description of reduction strategies
- strategies in different frameworks (term rewriting, graph rewriting, infinitary rewriting, lambda calculi, higher order rewriting and explicit substitutions, conditional rewriting, rewriting with built-ins, narrowing, constraint solving, etc.) and their application in (equational, functional, functional-logic) programming (languages)
- properties of reduction strategies / computations under strategies (e.g., completeness, computability, decidability, complexity, optimality, (hyper-)normalization, cofinality, fairness, perpetuality, context-freeness, neededness, laziness, eagerness, strictness)
- interrelations, combinations and applications of reduction under different strategies (e.g., equivalence conditions for fundamental properties like termination and confluence, applications in modularity analysis, connections between strategies of different frameworks, etc.)
- program analysis and other semantics-based optimization techniques dealing with reduction strategies
- rewrite systems / tools / implementations with flexible / programmable strategies as essential concept / ingredient
- specification of reduction strategies in (real) languages
- data structures and implementation techniques for reduction strategies

**Submissions:** we solicit papers on all aspects of reduction strategies in rewriting and programming. Submissions should describe unpublished work, except for survey papers which are explicitly welcome, too. Submissions should not exceed 10 pages (however, survey papers may be longer). Please, send a message containing the title, authors, and abstract of your submission before January 21, 2005 to the PC co-chairs at [wrs05@pps.jussieu.fr](mailto:wrs05@pps.jussieu.fr). The full version of your submission should be sent in postscript or PDF format before January 31, 2005. Submissions should include the title, authors' names, affiliations, addresses, and e-mail. Selection of papers by the PC will be based on originality, significance, and correctness. Final versions will be due by March 18, 2005.

**Publication:** accepted papers will be included in the preliminary workshop proceedings that will be available at the workshop. The final proceedings will be published in the Electronic Notes in Theoretical Computer Science (ENTCS) series of Elsevier.