

WRS 2007

7th International Workshop on Reduction Strategies in Rewriting and Programming

<http://www.rdp07.org/wrs.html>

June 25, 2007, Paris, France

The workshop promotes and stimulates international research and collaboration in the area of strategies. It encourages the presentation of new directions, developments, and results as well as surveys and tutorials on existing knowledge in this area. WRS takes place annually since 2001. For more information, see <http://www.dsic.upv.es/~wrs/>

Reduction strategies study which subexpression(s) of an expression should be selected for evaluation and which rule(s) should be applied. These choices affect fundamental properties of a computation such as laziness, strictness, completeness, and need, to name a few. For this reason some programming languages, e.g., Elan, Maude, *OBJ*, and Stratego, allow the explicit definition of the evaluation strategy, whereas other languages, e.g., Clean, Curry, and Haskell, allow its modification.

In addition to evaluation strategies, WRS 07 also covers the use of strategies and tactics in other areas such as theorem proving and termination proving. Thus, strategies pose challenging theoretical problems and play an important role in practical tools such as theorem provers, model checkers, and programming languages. In implementations of languages, strategies bridge the gap between operational principles, e.g., graph and term rewriting, narrowing and lambda-calculus, and semantics, e.g., normalization, computation of values and head-normalization.

Program Committee

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Topics of interest include, but are not restricted to:

- foundations for the definition and semantic description of reduction strategies
- strategies in rewriting, lambda calculi, narrowing, constraint solving, etc.
- application of strategies to any kind of programming language
- strategies and tactics in theorem proving, termination proving, etc.
- properties of strategies and corresponding computations, e.g., completeness, computability, decidability, complexity, optimality, normalization, cofinality, fairness, perpetuality, context-freedom, need, laziness, eagerness, strictness
- interrelations, combinations and applications of reduction under different strategies, e.g., evaluation mechanisms in programming languages, equivalence conditions for properties like termination and confluence, applications in modularity analysis, connections between strategies of different frameworks, etc.
- analysis and optimization techniques dealing with reduction strategies
- rewrite systems, tools, implementations with flexible strategies
- specification of reduction strategies in real languages
- strategies suitable to software engineering problems and applications
- tutorials and systems related to strategies

Important Dates

Title & Abstract:	April 19, 2007
Paper Submission:	April 23, 2007
Notification:	May 18, 2007

Publication. The workshop will have both informal and formal proceedings:

- The informal proceedings contain all accepted submissions (of both category (A) and (B), see below). They will be distributed at the workshop and will also be available on-line.
- The formal proceedings contain all accepted submissions of category (A), see below. The formal proceedings will be published by Elsevier as a volume of ENTCS.

Submissions. There are two categories of submissions:

(A) *Submissions to the formal proceedings*

These submissions must describe unpublished work. All accepted submissions of this category will be published both in the informal and in the formal proceedings.

(B) *Submissions to the informal proceedings*

Accepted submissions of this category will be published in the informal, but not in the formal proceedings. These submissions may also describe work that has been or will be submitted or published elsewhere or work in progress.

Accepted submissions of both categories will be presented at the workshop (where the talks for papers of both categories have the same length). The page limit for papers in both category (A) and (B) is 15 pages in ENTCS-style. The necessary style files and instructions can be found at <http://www.entcs.org/prelim.html>. We also explicitly solicit survey and tutorial submissions (of either category) which may be longer. The submission page for WRS 2007 is

<http://www.easychair.org/WRS2007/>

WRS 2007 is part of the *4th Federated Conference on Rewriting, Deduction & Programming*, see <http://www.rdp07.org>