Pre-proceedings

2nd Joint International Workshop on
Strategies in Rewriting, Proving
and Programming
IWS 2012

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Editors:

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Preface

Strategies are ubiquitous in automated reasoning engines, high-level programming languages, and verification tools. The useability, performance, and practical impact of these systems depends on the strategy used. Nevertheless, much knowledge about strategies and search plans remains hidden in the implementations of theorem provers, proof assistants, model builders, interpreters, SAT and SMT solvers, decision procedures for satisfiability, termination provers and verifiers.

The Second Joint International Workshop on Strategies in Rewriting, Proving and Programming provided a forum to communicate research about strategies and disseminate knowledge that would otherwise remain accessible only as code, facilitating synergies between the different contexts where strategies are applied in the neighbouring fields of automated reasoning and programming languages.

Topics of interest for IWS workshops include:

- Strategies in automated theorem provers, automated model builders, decision procedures, combinations of decision procedures, SAT-solvers and SMT-solvers.

- Strategies and tacticals in interactive theorem provers and proof assistants.

- Strategies in interpreters of programming languages, rewriting engines and termination provers.

- Strategies in program analysers and tools for verification modulo theories.

- Performance evaluation: empirical evaluation, comparison and optimisation of strategies.

- Strategy analysis: evaluation, comparison, and optimisation of strategies by mathematical approaches to model search spaces and measure search complexity.

- Strategy languages: essential constructs, meta-level features, design, implementation and application.

This volume contains abstracts of the papers presented at the 2nd Joint International Workshop on Strategies in Rewriting, Proving and Programming, IWS 2012, held in Manchester on the 1st July 2012, as a satellite event of IJCAR 2012 (the 6th International Joint Conference on Automated Reasoning). Since FLoC 2010, where its first edition was held, the Joint International Workshop on Strategies in Rewriting, Proving and Programming (IWS) merges two successful series of worshops: the Strategies in Automated Deduction workshops and the Workshops on Reduction Strategies (WRS).

Five papers were presented at IWS 2012. In addition, the programme of IWS 2012 included two invited talks, by Hélène Kirchner and Renate Schmidt.

The Programme Committee consisted of:

- Maria Paola Bonacina, Università degli Studi di Verona (co-chair)

- Dan Dougherty, Worcester Polytechnic Institute

- Bruno Dutertre, SRI International

- Maribel Fernández, King's College London (co-chair)

- Mnacho Echenim, Université de Grenoble

- Swen Jacobs, EPFL

- Salvador Lucas, Universidad Politécnica de Valencia

- Christophe Ringeissen, INRIA

- Stephan Schulz, TU Munich

We would like to thank all those who contributed to IWS 2012. We are particularly grateful to the Programme Committee members for their support and efficient work.

Maria Paola Bonacina
Maribel Fernández

10 June 2012