Marco Maratea, Ivan Serina (Eds.)

# **RCRA 2017**

Proceedings of the 24th RCRA International Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion 2017 (RCRA 2017)

Bari, Italy, November 14-15, 2017.

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## Preface

This volume contains the papers presented at RCRA 2017, the 24th RCRA International Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion (http://rcra.aixia.it/rcra2017), held within the XVI Conference of the Italian Association for Artificial Intelligence (AI\*IA 2017), in Bari, Italy, on November 14-15, 2017.

Since the 2007 edition, the RCRA workshops have focused on the theme of algorithms in artificial intelligence, proposing benchmarks to compare them and study their efficiency through experimental evaluation. Since then, the workshop was organized in Udine (Italy), Reggio Emilia (Italy), Bologna (Italy), Barcelona (Spain), Rome (Italy), Vienna (Austria), Pisa (Italy), Ferrara (Italy) and Genova (Italy).

There were 12 submissions. Each submission was reviewed by at least three program committee members. The committee decided to accept all 12 papers for presentation at RCRA 2017. Among them 5 are original papers and are included in this volume.

We would like to thank Program Committee members and the external reviewers of RCRA 2017 for their work, as well as to the authors who submitted their articles to the conference.

We also would like to thank the Department of Computer Science, at the University of Bari and the organizers of AI\*IA 2017, for hosting RCRA 2017.

Finally we acknowledge the EasyChair team and CEUR-WS.org that helped us in organizing the conference and producing the proceedings.

November 2017 Bari

> Marco Maratea, Ivan Serina Workshop Organizers

## **Programme Chairs**

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Serina, Ivan	University of Brescia

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Answer Set Enumeration via Assumption Literals information on submission	
Mario Alviano, Carmine Dodaro.	
Appeared in the Proceedings of the XVth International Conference of the Italian	
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- December 1, 2016, vol. 10037 of Lecture Notes in Computer Science, pages	
149–163. Springer, 2016.	

#### Algebraic Particle Swarm Optimization for the Permutations Search Space information on submission

Marco Baioletti, Alfedo Milani, Valentino Santucci. Appeared in the Proceedings of the 2017 IEEE Congress on Evolutionary Computation (CEC), pages 1587–1594, June 2017.

#### A Crisp and Soft Library for Abstract Argumentation

Stefano Bistarelli, Fabio Rossi, Francesco Santini. Appeared in the Proceedings of the 29th IEEE International Conference on Tools with Artificial Intelligence, ICTAI. IEEE Computer Society, 2017

#### Constraints, Lazy Constraints, or Propagators in ASP Solving: An Empirical

#### Analysis

Bernardo Cuteri, Carmine Dodaro, Francesco Ricca, Peter Schüller. Appeared in *Theory and Practice of Logic Programming*, vol 17, pages 780–799, 2017.

Planning with Always Preferences by Compilation into STRIPS with Action Costs Luca Ceriani, Alfonso Emilio Gerevini.

Appeared in the *Proceedings of the Eighth Annual Symposium on Combinatorial Search, SOCS 2015, 11-13 June 2015, Ein Gedi, the Dead Sea, Israel.*, pages 161–165. AAAI Press, 2015

#### Multi-Objective Optimization in a Job Shop with Energy Costs through Hybrid Evolutionary Techniques

Miguel Ángel González Fernández, Angelo Oddi, Riccardo Rasconi. Appeared in the Proceedings of the Twenty-Seventh International Conference on Automated Planning and Scheduling, ICAPS 2017, Pittsburgh, Pennsylvania, USA, June 18-23, pages 140–148, 2017.

# Compressed Path Databases with Ordered Wildcard Substitutions information on submission

Matteo Salvetti, Adi Botea, Alessandro Saetti, Alfonso Emilio Gerevini. Appeared in the Proceedings of the Twenty-Seventh International Conference on Automated Planning and Scheduling, ICAPS 2017, Pittsburgh, Pennsylvania, USA, June 18-23, pages 250–258, 2017.