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Important Dates

Submission Due: May 14, 2007

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HM 2007

4th International Workshop on Hybrid Metaheuristics

October 8-9, 2007

Universität Dortmund, Germany

INTRODUCTION

Hybrid Metaheuristics are skilled combinations of different metaheuristics such as simulated annealing, evolutionary algorithms, tabu search, ant colony optimization, scatter search, iterated local search. Each of them has tackled plenty of hard problems in a huge variety of areas, including bioinformatics, logistics, engineering, business, etc. Metaheuristics are considered state-of-the-art methods for many problems. In recent years, it has become evident that the concentration on a sole metaheuristic is rather restrictive. A skilled combination of concepts can provide a more efficient behavior and a higher flexibility when dealing with real-world and large-scale problems. The hybridization of metaheuristics with AI/OR techniques, such as integer linear programming and constraint programming, has been proven to be very effective as well.

SCOPE

Contributions to the workshop should address the combination and comparison of different metaheuristic components and concepts. Also negative results (e.g., a component shows poor performance for the majority of test instances) are of considerable importance in hybridization. Such results have often been ignored in standard metaheuristics research. Furthermore, the enlarged number of parameters of the combined concepts attracts more attention to the design of algorithms and the tuning of parameters. This workshop aims at papers that give good examples for carefully designed and well-analyzed hybrid metaheuristics. Researchers are explicitly encouraged to address statistical validity of their results. The extraction of guidelines for the general design of hybrid metaheuristics would be desirable.

TOPICS OF INTEREST

The scope of this workshop includes, but is not limited to: novel combinations of components from different metaheuristics, hybridization of metaheuristics and AI/OR techniques, low-level hybridization, high-level hybridization, portfolio techniques, expert systems, co-operative search, taxonomy, terminology, classification of hybrid metaheuristics, co-evolution techniques, automated parameter tuning, empirical and statistical comparison, theoretic aspects of hybridization, parallelization, software libraries.

PAPER SUBMISSION

Researchers are invited to submit original work as papers of not more than 15 pages. Authors are encouraged to submit their papers in LaTeX. Papers must be submitted in LNCS style. As in recent years, all accepted papers will be published in the LNCS series of Springer.

TRADITION

HM 2007 will be the fourth workshop of the series previously held in Spain (HM 2004 in Valencia, HM 2005 in Barcelona, and HM 2006 on Gran Canaria). It intends to bring researchers in metaheuristics and its applications together and provide them with a relaxed atmosphere for interaction and discussion. HM 2007 is organized as a single-track conference and a non-profit event.