

HM 2006

3rd International Workshop on Hybrid Metaheuristics

October 13–15, 2006

Gran Canaria, Spain

Program Committee

Thomas Bartz-Beielstein (Universität Dortmund, DE)
Mauro Birattari (Université Libre de Bruxelles, BE)
Ralf Bruns (Fachhochschule Hannover, DE)
Francisco Chicano (Universidad de Málaga, ES)
Óscar Cordón (Universidad de Granada, ES)
Carlos Cotta (Universidad de Málaga, ES)
Luca Di Gaspero (Università degli Studi di Udine, IT)
Marco Dorigo (Université Libre de Bruxelles, BE)
Pascal van Hentenryck (Brown University, USA)
Joshua Knowles (University of Manchester, UK)
Andrea Lodi (Università di Bologna, IT)
Vittorio Maniezzo (Univ. degli Studi di Bologna, IT)
Belén Melián (Universidad de La Laguna, ES)
Daniel Merkle (Universität Leipzig, DE)
Bernd Meyer (Monash University, AU)
Martin Middendorf (Universität Leipzig, DE)
José A. Moreno (Universidad de La Laguna, ES)
David Pelta (Universidad de Granada, ES)
Steven Prestwich (4C, Cork, IR)
Günther Raidl (Technische Universität Wien, A)
Andrea Schaerf (Università degli Studi di Udine, IT)
Thomas Stützle (Université Libre de Bruxelles, BE)
El-Ghazali Talbi (École Polytechnique Univ. Lille, FR)
José Luis Verdegay (Universidad de Granada, ES)
Fatos Xhafa (Universitat Politècnica Catalunya, ES)

Conference Chairs

Francisco Almeida (Universidad de La Laguna, ES)
J. Marcos Moreno (Universidad de La Laguna, ES)
Melquíades Pérez (Universidad de La Laguna, ES)

Program Chairs

María J. Blesa (Universitat Politècnica Catalunya, ES)
Christian Blum (Universitat Politècnica Catalunya, ES)
Andrea Roli (Università "G.D'Annunzio", IT)
Michael Sampels (Université Libre de Bruxelles, BE)

Important Dates

Submissions Due: May 15, 2006
Notification: June 30, 2006
Final Papers Due: July 14, 2006

Contact Information

Francisco Almeida
DEIOC, Universidad de La Laguna
Avda. Astrofísico Sánchez, s/n
E-38271 La Laguna, Spain

<http://www.lsi.upc.edu/~hm2006>

hm2006@lsi.upc.edu

Metaheuristics have received considerable interest in the fields of applied artificial intelligence and combinatorial optimization. Plenty of hard problems in a huge variety of areas, including bioinformatics, logistics, engineering, business, etc., have been tackled successfully with metaheuristic approaches. For many problems the resulting algorithms are considered to be the state-of-the-art methods.

In recent years, it has become evident that the concentration on a sole metaheuristic is rather restrictive. A skilled combination of concepts of different metaheuristics, a so called hybrid metaheuristic, can provide a more efficient behavior and a higher flexibility when dealing with real-world and large-scale problems. Also the hybridization of metaheuristics with AI/OR techniques, such as integer linear programming and constraint programming, has been proven to be very effective.

Contributions to the workshop should address the combination and comparison of different metaheuristic components and concepts. In contrast to standard research in metaheuristics, 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. Further, the above mentioned enlarged selection of parameters will attract more attention to this part of designing algorithms.

The HM 2006 workshop aims at papers that give good examples for carefully designed and well-analyzed hybrid metaheuristics. The extraction of guidelines for the general design of hybrid metaheuristics would be desirable. Researchers are explicitly encouraged to address statistical validity of their results

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, theoretical aspects of hybridization, parallelization, software libraries.

Paper Submission: Researchers are invited to submit papers of not more than 15 pages. Authors are strongly encouraged to submit their papers in LaTeX. Papers must be submitted in LNCS style (see Information for LNCS Authors at www.springeronline.com). It is planned that accepted papers will be published in the Lecture Notes in Computer Science series of Springer-Verlag. See the conference website or contact the workshop organizers for further information.

Tradition: HM 2006 will be the third workshop of the series, after HM 2004 in Valencia (Spain), and HM 2005 in Barcelona (Spain) with proceedings in LNCS 3636. The conference is organized as a single-track conference and as a non-profit event.