

Call for papers

## Int. Journal of Computational Intelligence Research (IJCIR)

Feature Issue on

### ***Particle Swarm Optimization***

Guest editors: Maurice Clerc, James Kennedy and Patrick Siarry

Particle Swarm Optimization (PSO) is a stochastic, population-based optimization algorithm introduced in 1995 by James Kennedy and Russel Eberhart. Many variants of PSO have been developed since, including constrained, multiobjective, and discrete or combinatorial versions, and applications have been developed using PSO in many fields. An international three-year project, XPS (eXtended Particle Swarms Project <http://xps-swarm.essex.ac.uk/>) involving five universities, was launched in October 2004.

Instead of competition/selection, like say in Evolutionary Computation, PSO makes use of cooperation, according to a paradigm sometimes called "swarm intelligence". Such systems are typically made up of a population of simple interacting agents without any centralized control, and inspired by examples that can be found in nature (ant colonies, bird flocking, animal herding, bacteria molding, fish schooling, etc.)

We take the opportunity of the second French-speaking PSO seminar *OEP'2007* in April 2007 in Paris ([http://www.particleswarm.info/oep\\_2007](http://www.particleswarm.info/oep_2007)) to prepare a special issue of IJCIR about this method (that issue will include the extended versions of some communications presented at *OEP'2007*, but all contributions outside the frame of the seminar are welcome). The goal is to collect state-of-the-art research papers that discuss recent developments in that area and to highlight some general ideas.

Therefore, authors are invited to submit their original and unpublished works including, but not limited to, the following:

Modelling and analysis of PSO variations. Works about easy to use methods – adaptive or even parameter-less ones – would be particularly welcome

Theoretical optimization studies applicable to PSO

Comparisons with some other methods

Hybrid methods that make use of PSO

Real life applications

### ***Important dates***

Deadline for submissions: April 30th, 2007

However informal intent statements before this date would be welcome.

Date of completion of the reviewing process: June 30th, 2007

### ***Submission process***

We encourage authors to send submissions via email in PDF or Postscript format to [Maurice.Clerc@WriteMe.com](mailto:Maurice.Clerc@WriteMe.com). For the accepted papers the authors will have to follow IJCIR style (<http://www.padath.net/> to access LaTeX and Word templates).

Alternatively four hard copies could be sent by mail to:

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