

WIVACE 2012

Italian Workshop on Artificial Life and Evolutionary Computation

Artificial Life, Evolution and Complexity

Parma, Centro S. Elisabetta **University Campus** 20-21 February 2012

Workshop Aims

WIVACE 2012 will offer researchers in Evolutionary Computation, Artificial Life and Complex Systems a chance to present their results in a collaborative environment, in which knowledge can be shared based on a multidisciplinary approach to the study and modeling of natural biological processes.

The workshop will include oral sessions, a poster session, two invited talks by Domenico Parisi (ISTC-CNR) and Riccardo Poli (University of Essex), a tutorial about "Organic Computing" by Christian Müller-Schloer (University of Hannover), and a discussion panel. We invite contributions about the theory and applications of Evolutionary Computation and Artificial Life, with special regard to the study of the complex processes studied by these disciplines and, in particular, to the following non-exhaustive list of topics:

Applications of Bio-inspired Algorithms **Bio-inspired Computational Paradigms**

Bio-inspired Robotics Complex System Biology **Emergent Behaviours**

Evolutionary Systems' Dynamics

Financial/Economical Systems

Genetic and Evolutionary Algorithms **Hybrid Optimization Algorithms**

Models of Collective Behaviour

Parallel Implementation of Bio-inspired Models

Self-organising Systems

Swarm Intelligence e Artificial Ant Systems

System Biology

Call for Papers

Two kinds of contributions will be considered:

Communications (in English or Italian, up to 4 pages, presented as posters) **Full Papers** (in English, up to 12 pages, presented orally or as posters)

submitted, later than 15 contributions can be no December 2011. https://www.easychair.org/conferences/?conf=wivace2012. The proceedings will be made available online and published as an ISBN-registered CD. A selection of the full papers will be published (possibly in an extended version) in the book "Artificial Life, Evolution and Complexity" published by Springer.

Important Dates:

Deadline for Paper Submission: 6 January 2012 Notification of Acceptance: 20 January 2012 Final Version Due: 1 February 2012 20-21 February 2012 Workshop:

Email: wivace2012@ce.unipr.it Web site: http://wivace2012.ce.unipr.it

Facebook: WIVACE2012 LinkedIn: WIVACE2012

Scientific Organisation

Stefano Cagnoni - Marco Mirolli - Marco Villani

Local Organisation

Pablo Mesejo - Federico Sassi - Youssef Nashed - Roberto Ugolotti

Programme Committee

Alberto Acerbi - Michele Amoretti - Luca Ascari - Antonia Azzini - Gianluca Baldassarre - Lucia Ballerini - Armando Bazzani - Vitoantonio Bevilacqua - Leonardo Bocchi - Ernesto Burattini - Raffaele Calabretta - Angelo Cangelosi - Timoteo Carletti - Antonio Chella - Roberto Cordeschi - Ivanoe De Falco - Antonio Della Cioppa - Cecilia Di Chio - Marco Dorigo - Francesco Fontanella - Luigi Fortuna - Mario Giacobini - Marco Locatelli - Giancarlo Mauri - Orazio Miglino - Alberto Moraglio - Monica Mordonini - Luca Mussi - Giuseppe Nicosia - Stefano Nolfi - Pietro Pantano - Mario Pavone - Clara Pizzuti - Riccardo Poli - Andrea Roli - Giuseppe Scollo - Roberto Serra - Giandomenico Spezzano - Giovanni Squillero - Pietro Terna - Andrea Tettamanzi - Vito Trianni - Elio Tuci - Leonardo Vanneschi