

evo**complex** 2011

2nd european event
on algorithms
and complex systems

27-29 april 2011
torino – italy
www.evostar.org

submission deadline
* 22 november 2010
notification to authors
* 7 january 2011
camera-ready deadline
* 1 february 2011

Complex systems are ubiquitous in physics, economics, sociology, biology, computer science, and many other scientific areas. Typically, a complex system is composed of smaller aggregated components, whose interaction and interconnectedness are non-trivial (e.g., interactions can be high-dimensional and non-linear, and/or the connectivity can exhibit non-trivial topological features such as power-law degree distribution, high clustering coefficient, etc.). This leads to emergent properties of the system, not anticipated by its isolated components. Furthermore, when the system behaviour is studied from a temporal perspective, self-organisation patterns typically arise.

evocomplex** 2011** covers all aspects of the interaction of evolutionary algorithms (and metaheuristics in general) with complex systems. It is a part of the **evo**applications**** conference, held within **evo***, the major annual European event on evolutionary computation. **evo*** is always a very enjoyable event offering good opportunities for networking, informal contact, exchange of ideas and discussions with fellow researchers in a friendly and relaxed setting.

areas of interest and contributions

High quality papers are sought on topics related to the confluence of evolutionary algorithms and complex systems, including (but not limited to) the use of evolutionary algorithms for the analysis or design of complex systems, such as for example:

- * Complex networks, e.g., social networks, ecological networks, interaction networks, etc;
- * Chaotic systems;
- * Self-organizing systems, such as e.g., multiagent systems, social systems, etc;
- * Iterated function systems and cellular automata;
- * Complex information systems.

Relevant topics also include the use of complex systems and tools thereof to model, analyse or improve the performance of evolutionary algorithms, such as for example:

- * Complex population structures;
- * Self-organized criticality;
- * Emergent behaviour;
- * Attractors.

publication details

Accepted papers will appear in the proceedings of **evo***, published in a volume of the *Springer Lecture Notes in Computer Science*, which will be available at the Conference.

submission details

Submissions must be original and not published elsewhere. The submissions will be peer reviewed by at least three members of the program committee. The authors of accepted papers will have to improve their paper on the basis of the reviewers' comments and will be asked to send a camera ready version of their manuscripts. At least one author of each accepted work has to register for the conference and attend the conference and present the work.

The reviewing process will be double-blind, please omit information about the authors in the submitted paper. Submit your manuscript in Springer LNCS format.

- * Submission link:
<http://myreview.csregistry.org/evoapps11>
- * Page limit: 10 pages.

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