

CALL FOR PAPERS: Workshop on the Emergence of Social Behaviour

Source: <http://sci.tech-archive.net/Archive/sci.bio.evolution/2007-02/msg00235.html>

- *From:* daneshatarapore@xxxxxxxxxx
 - *Date:* Fri, 16 Feb 2007 17:21:18 -0500 (EST)
-

Dear Researcher,

We will be organising a workshop on Emergence of Social Behaviour at ECAL 2007 in Lisbon, Portugal. We invite your high quality submissions to this workshop.

CALL FOR PAPERS

Workshop on the Emergence of Social Behaviour:
From Cooperation to Language
European Conference on Artificial Life (ECAL 2007)
Lisbon, Portugal, 10th September 2007
<http://lis.epfl.ch/workshops/ECAL07>

Important Dates

- * Submission deadline: 30.04.07
- * Notification of acceptance: 15.05.07
- * Camera ready submission: 15.06.07
- * Workshop: 10.09.07

Brief description

The emergence of social groups has been identified as a major transition in the evolution of complex life [1]. However, the conditions that allowed individuals to overcome conflict and establish different types of stable social behaviours remain a major unresolved question.

Different types of social behaviour, such as altruism, cooperation and communication in social bacteria, social insects, and vertebrates, as well as language in human societies, show the huge range of complexity and the integrated role of social behaviour in the formation of

CALL FOR PAPERS: Workshop on the Emergence of Social Behaviour

complex

life. Most research focuses on one particular type of sociality within this range; however, it remains unclear how different levels of social complexity are achieved, how they follow from one another and how a gradual complexification in sociality occurs.

Current work addresses the emergence of social behaviour using different approaches, from analytical and game theoretical models, minimalist and complex agent-based simulations to robot language games and experiments in simple social organisms.

The focus of the workshop is threefold: (1) understanding the minimum requirements for the emergence of each type of sociality and the transitions between these various degrees of complexity from non-sociality to sociality; (2) finding common mechanisms in the emergence of different types of social behaviour observed in natural systems, how they relate to each other and how they are influenced by environmental conditions and other evolutionary parameters; (3) finding the strengths and limitations of the various scientific approaches taken in addressing these questions and integrating them into a common framework for research on social behaviour.

[1] Maynard-Smith, J. and Szathmari, E. (1997). *The Major Transitions in Evolution* (New York: Oxford University Press).

Call for Papers

The workshop welcomes contributions from research areas that address one or more of the following topics:

- * Types of social behaviour
 - Coordination, Cooperation, Conflict and Altruism
 - Communication and Language
- * Factors influencing the emergence of social behaviour
 - Interaction topologies (mean field, small world, etc.): Limited dispersal, range of competition, levels of selection
 - Social hierarchies and social queues
 - Sexual vs. asexual reproduction, monogamy vs. polygamy, reproductive skew models
 - Individual and kin recognition
 - Reputation and tags

In order to unify the different fields of study tackling these issues,

CALL FOR PAPERS: Workshop on the Emergence of Social Behaviour

and come up with a general framework to study social behaviour that will result in a foundation for future cooperation and joint work, we stress the importance of the participation of an interdisciplinary body of researchers in this workshop.

Submission Instructions

Submitted papers should not exceed 10 pages. The format of the papers should follow the ECAL 2007 format. Please refer to the ECAL style guide (<http://www.ecal2007.org/submissions.htm>) for details. Submissions should be sent in pdf format to markus.waibel@xxxxxxx by 30.04.07.

Submitted papers will undergo a peer-review process. The proceedings will be published in a special issue on the emergence of social behaviour in an appropriate journal.

Organising Committee

- * Markus Waibel
- * Sara Mitri
- * Julien Hubert
- * Danesh Tarapore

Email: {firstname}.{lastname}@epfl.ch

Programme Committee

- * Jason Noble
- * Rick Riolo
- * Chris Knight
- * Simon Kirby
- * Andy Gardner
- * Christoph Hauert
- * Dario Floreano
- * Laurent Keller