SIMULATION

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Special Issue on
"Agent-Based Simulation of Complex Social Systems"

Guest Editors

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There is an increasing interest in Agent-based Social Simulation as a new paradigm to study Complex Systems. While the physical world is considered composed of systems that are linear or approximately linear, it is evident that human societies, economics, institutions and organizations are complex systems, using *complex* in the technical sense to mean that the behaviour of the system as a whole cannot be determined by partitioning it and understanding the behaviour of each of the parts separately (a classic strategy of physical sciences).

We look for research that adopts this view of complexity that in turn comes from two sources:

- From the aggregate outcome of simple agents' myriad interactions taking notice of each other agents' actions: institutional complexity.
- From agents trying to model other agents modelling of them, modelling those agents, *ad infinitum*. This is the main source of complexity in games: the expectations about other agents' strategic behaviour.

Topics suitable for this Special Volume include, but are not limited to, the following:

- Simulation of 'realistic' complex systems: ABS for policy-makers.
- Simulation of human behaviour: Human-subject experimentation.
- Contributions from Social Neuroscience and Neuroeconomics.
- Methodological issues for ABS: Modelling and simulation facilities.
- Rigour and Replication in social simulation.
- Scalability of agent based simulations. Limitations for large scale models.
- Metamodels in social simulation.
- Socially inspired mechanisms.

Full papers, describing original, previously unpublished research work, experimental efforts and practical experiences are solicited. The due dates given below are firm and must be observed to ensure timely review and, in the event of acceptance, inclusion of a paper in the special issue.

Accepted papers for publication would be invited for presentation in a special session within the **SImulation of COmplex Social SYStems Workshop (SICOSSYS'2010)**, to be held within the ***"2010 Summer Simulation Multiconference (SummerSim'10)"*** in Ottawa, July 11-14, 2010.

Instructions for Manuscript Submission

For manuscript formatting and other guidelines, please visit the Author Guidelines for SIMULATION page.

Submissions for Full Paper Review

All manuscripts must be submitted electronically through the SCS Manuscript Management System. To upload the paper, follow the displayed instructions. In the title page, author(s) must specifically mark that the paper is intended for this special issue as follows: ***"Submission for the Special Issue of Simulation: Agent-Based Simulation of Complex Social Systems"***.

Note: Manuscripts must not have been previously published or be submitted for publication elsewhere. Each submitted manuscript must include title, names, authors' affiliations, postal and e-mail addresses, an extended paper, and a list of keywords. For multiple author submission, please identify the corresponding author.

Due Dates

Paper submissions: 30th March 2010

Notification of acceptance to authors: 30th May 2010

SICOSSYS Workshop: 11th July 2010

Final versions due: 30th September 2010

Expected Publication: November 2010

Final Paper Submissions

Each final submission must be prepared based on the Simulation journal requirements (see the Author Guidelines for SIMULATION page).

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