

Special Session on Complex Adaptive Systems

Organisers:

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Aim and Scope:

Complex adaptive systems involve many components, often called agents that interact and adapt or learn. It is a system composed of many interacting agents, such that the collective behavior of those agents together is more than the sum of their individual behavior. The collective behavior are sometimes also called emergent behavior, and a complex adaptive system can thus be said to be a system of interacting parts that displays emergent behavior. Examples include ecosystems, stock markets and economies, biological evolution, and indeed the whole of human society.

This special track seeks high-quality original and unpublished papers in topics including but not limited to the following:

- Adaptation
- Agent-based modeling
- Biological evolution
- Cellular automata
- Collective action
- Criticality
- Dynamic systems
- Economics and markets
- Ecosystems
- Emergence
- Game theory
- Human societies
- Immune systems
- Pattern formation
- Risk management systems
- Social networks
- Socio-physics
- Synchronization

Hiroshi Sato is Associate Professor of Department of Computer Science at National Defense Academy in Japan. He received B.E. degree in Physics from Keio University in Japan, and M.E. and D.E. in Computer Science from Tokyo Institute of Technology in Japan. His research interests include agent-based simulation, evolutionary computation, and artificial intelligence. He is a member of Japanese Society for Artificial Intelligence, Society of Instrument and Control Engineers and the Institute of Electronics, Information and Communication Engineers.

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