

InterSymp-2010



22nd International Conference on Systems Research, Informatics and Cybernetics

August 2 - 6, 2010
Baden-Baden, Germany

Conference Chair: **Professor GEORGE E. LASKER**
**International Institute for Advanced Studies in Systems
Research and Cybernetics (IIAS), Canada**

30th Anniversary of the IIAS

4th International Symposium on Multiagent Systems, Robotics and Cybernetics: Theory and Practice

Organization and Chair: **Professor JOCHEN PFALZGRAF**
Department of Computer Sciences
University of Salzburg, Austria

Date: **August 4 - 5, 2010**

<http://www.cosy.sbg.ac.at/~jpfalz/InterSymp-2010.html>

Previous Events with the same title:

1st Symposium at InterSymp-2005, August 1 - 7, 2005, Baden-Baden

2nd Symposium at InterSymp-2007, July 30 - August 4, 2007, Baden-Baden

3rd Symposium at InterSymp-2009, August 3 - 7, 2009, Baden-Baden

Sponsored by **IIAS** <http://www.iias.edu>

Focus of the Symposium

The symposium invites all kinds of contributions and presentations dealing with modeling aspects in the highly interdisciplinary and very large fields mentioned in the title of the symposium. Work in the interplay and interaction of theory and practice - including industrial applications - is welcome.

The notion of a Multiagent System (MAS) meanwhile can be considered as a universal modeling paradigm - assuming that the definition of agent and communication and cooperation can be very general (typed objects and relations). Multiagent systems are almost everywhere, there is a huge variety of systems that can be interpreted as a MAS. A physicist might tend to say that a MAS is a many-particle system with interaction.

TOPICS include (but are not limited to)

- Multiagent Systems (MAS), General Modeling Aspects
- Artificial, Technical Agents and Human Agents
- MAS, ROBOT Simulation and Simulation of Human Agents
- Agent Technology and Software Systems
- Human and Robot Cooperation and Interaction
- RFID Technological Aspects
- Knowledge-based Systems, Knowledge Management, Information Retrieval
- MAS and the Semantic Web
- Automated Reasoning, Logical Inference Systems
- Decision Support Systems, Reasoning and Uncertainty
- Scheduling and Planning
- Categorical, Algebraic, Geometric, Topological Modeling Aspects
- Petri Nets, Process Algebras, Activity Networks
- Logical Modeling, Unifying Frameworks
- Connectionist Network Techniques
- Learning and Selforganization in Systems
- Coalgebraic Methods in Systems Theory
- Communication and Cooperation, Swarm Intelligence
- Soft Computing Techniques and Approaches, Hybrid Systems Modeling
- Symbolic Computation Approaches
- Generalized Automata, Categorical Methods
- Computational MAS
- Cybernetic Systems With Intention and Subjectivity
- Simulation of Emotional Behavior
- Humanoid Robots
- Trends in Future Service Robots Construction
- Cognitive Aspects of Technological Systems: Cognitive Factory
- Production Automation Scenarios, Virtual Reality, Augmented Reality
- Industrial Projects and Applications

Some Links of Interest for the Symposium Topics:

<http://www.cosy.sbg.ac.at/~jpfalz/EUROCAST.html> [EUROCAST](#)

<http://www.cosy.sbg.ac.at/~jpfalz/ROBOTICS.html> [ROBOTICS](#)

<http://www.cosy.sbg.ac.at/~jpfalz/ETAPS-2010.html> [ACCAT Workshop, ETAPS-2009](#)

<http://www.cosy.sbg.ac.at/~jpfalz/EwgDSS.html> [EwgDSS](#)

<http://home.att.net/~topologicalpsychology/> [Topological Psychology](#)

<http://www.cosy.sbg.ac.at/~jpfalz/MATHmod.html> [MATH Modeling Aspects](#)

Call for Papers:

Abstracts of approximately 200 words may be submitted (Microsoft Word or .pdf files) by Email to the Symposium Chairman. Extended Abstracts are welcome as well.

Review Process and Conference Proceedings:

All submitted abstracts will be reviewed.

It is intended to edit a **Proceedings Book** with invited contributions after the Symposium.

Information of the Editors: Final papers are limited to max. 5 pages.

Important Dates:

- May 15, 2010 Abstract due
- May 31, 2010 Notice of acceptance

Registration, General Information: <http://www.iias.edu>

Symposium Books

ADVANCES in MULTIAGENT SYSTEMS, ROBOTICS
and CYBERNETICS: Theory and Practice. **Volume I.**

Edited by: George E.LASKER and Jochen PFALZGRAF.

Published by: The INTERNATIONAL INSTITUTE for
ADVANCED STUDIES in SYSTEMS RESEARCH and CYBERNETICS
(Tecumseh, Canada), 2006. ISBN 1-897233-36-1

Volume II: Same Title, Editors, Publisher, 2008. ISBN 978-1-897233-61-0

The **Proceedings of the 3rd Symposium** on Multiagent Systems, Robotics and Cybernetics: Theory and Practice (held August 5 - 6, 2009, Baden-Baden, Germany) shall appear as a Book. Work is in progress.

Schedule of Talks: 1st, 2nd, 3rd Symposium

Program and Schedule of Talks of the 1st, 2nd and 3rd Symposium can be found on the Internet Page of the Symposium.

<http://www.cosy.sbg.ac.at/~jpfalz/InterSymp-2010.html>