Version 0.2 Fabian Rochner 1.3.2005

ARCS '05
Architecture of Computing Systems

**Call for Participation**

ARCS 2005 Architecture of Computing Systems (ARCS) – System Aspects in Organic and Pervasive Computing (http://www.teco.edu/arcs05/overview.html)

# WORKSHOP SELF-ORGANIZATION AND EMERGENCE: ORGANIC COMPUTING AND ITS NEIGHBORING DISCIPLINES

**March 17, 2005, Innsbruck**

## Timeline:

| | |
|---|---|
| 9:00 | Opening |
| 9:10 – 10:50 | Presentations 1 – 4 (20 min + 5 min discussion each) |
| 10:50 – 11:30 | Coffee break |
| 11:30 – 12:45 | Presentations 5 – 7 |

## Program

- The Bio-Chemical Information Processing Metaphor as a Programming Paradigm for Organic Computing
  *Peter Dittrich*
- Towards a Framework and a Design Methodology for Autonomous SoC
  *Gabriel Lipsa, Andreas Herkersdorf, Wolfgang Rosenstiel, Oliver Bringmann, Walter Stechele*
- Self-Organizing, Adaptive Data Fusion for 3d Object Tracking
  *Olaf Kähler, Joachim Denzler*
- Adaptive Object Acquisition
  *Gabriele Peters, Thomas Leopold, Claus-Peter Alberts, Markus Briese, Sebastian Entian, Christian Gabriel, Zhigiang Gao, Alexander Klandt, Jan Schultze, Jeremias Spiegel, Jürgen Thyen, Martina Vaupel, Peter Voß, Qing Zhu*

**Coffee break**

- Marching Pixels: A new Organic Computing Principle for Smart CMOS Camera Chips
  *Dietmar Fey, Daniel Schmidt*
- Organic Architectures for Large-Scale Environment-Aware Sensor Networks
  *Paul Lukowicz, Erhardt Barth, Jan T. Kim*
- Self-Organization in Sensor Networks using Bio-Inspired Mechanisms
  *Falko Dressler, Bettina Krüger, Gerhard Fuchs, Reinhard German*

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Language of presentation: German or English
Language of slides: English

**Organization and Program Committee**

Dietmar Fey, Institut für Informatik, University of Jena
Thomas Martinetz, Institute for Neuro- and Bioinformatics, University Lübeck
Christian Müller-Schloer, Institute of Systems Engineering, University of Hannover
Hartmut Schmeck, AIFB, University of Karlsruhe
Theo Ungerer, Institute of Computer Science, University of Augsburg
Rolf Würtz, Institut für Neuroinformatik, Ruhr University Bochum