

# 3<sup>rd</sup> Workshop on Dependable Many-Core Computing (DMCC 2011)

## CALL FOR PAPERS

As part of  
The International Conference on High Performance Computing & Simulation (HPCS 2011)  
<http://hpcs11.cisedu.info/>

In conjunction with  
The 7<sup>th</sup> International Wireless Communications and Mobile Computing Conference (IWCMC 2011)

**July 4 – July 8, 2011**  
**Istanbul, Turkey**



**Submission Deadline: January 11, 2011**

### **SCOPE AND OBJECTIVES**

Today, the integration of many cores is common - and the end of the road is not in sight. These many-core architectures bring up unprecedented capabilities, opportunities, as well as challenges. The more transistors are integrated on a chip and the more cores are introduced, the more faults can be asserted. These faults arise either during fabrication or operation. As the fabrication costs are continuously rising, it is most important to increase the output of a fab by software, architectural, or physical means. This workshop addresses issues and solutions through dependable software or hardware design of many-core systems.

**The Workshop topics include (but are not limited to) the following:**

- Dependable Many-Core Architectures
- Power-Aware Many-Core Design
- Dependable & Secure Many-Core Designs
- Many-Core Development and Design Tools
- Simulation Techniques
- System-Level Many-Core Implementation
- Many-Core Interconnect Technology
- Many-Core System-On-Chip Development
- Reconfigurable Computing and FPGAs
- Design for Testing
- Hardware and Software Debug Facilities
- Many-Core Programming and Optimization
- Application Partitioning and Load Balancing
- Hypervisors and Virtual Machine Technology
- Trusted and Untrusted Environments
- Virtualization for Dependability
- Dependability through Multi-Threading
- Fault Detection on the Physical Layer
- Fault-Tolerant Software Design
- Fault-Tolerant Hardware Design
- Fault-Tolerant HW/SW Co-Design

**PAPER SUBMISSIONS**

Submitted papers must not have been published or simultaneously submitted elsewhere. Submission should include a cover page with authors' names, affiliation addresses, fax numbers, phone numbers, and authors email addresses. Please, indicate clearly the corresponding author and include up to 6 keywords from the above list of topics and an abstract of no more than 450 words. The full manuscript should be at most 7 pages using the two-column IEEE format. Additional pages will be charged additional fee. Please include page numbers on all preliminary submissions to make it easier for reviewers to provide helpful comments. Submit a PDF copy of your full manuscript via email to the Workshop organizer at [Bernhard.Fechner@fernuni-hagen.de](mailto:Bernhard.Fechner@fernuni-hagen.de).

Only PDF files will be accepted. Each paper will receive a minimum of three reviews. Papers will be selected based on their originality, relevance, technical clarity and presentation. Authors of accepted papers must guarantee that their papers will be registered and presented at the workshop. Accepted papers will be published in the conference proceedings which will be made available at the time of the meeting.

If you have any questions about paper submission or the workshop, please contact the organizer.

**IMPORTANT DATES**

- Paper Submissions: ----- January 11, 2011**
- Acceptance Notification: ----- March 14, 2011**
- Camera Ready Papers and Registration Due: ----- April 14, 2011**
- Conference Dates: ----- July 4 – 8, 2011**

## **WORKSHOP ORGANIZER**

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### **International Program Committee:**

All submitted papers will be rigorously reviewed by the workshop technical program committee members following similar criteria used in HPCS 2011.

- **Koen de Boeschere**, University of Ghent, Belgium
- **Jörg Keller**, FernUniversität in Hagen, Germany
- **Jens Lisner**, TÜV Nord, Germany
- **Wei Liu**, Intel Labs, USA
- **Andre Osterloh**, BTC Oldenburg, Germany
- **Volkmar Sieh**, University Erlangen-Nuremberg, Germany
- **Peter Sobe**, University of Lübeck, Germany
- **Sascha Uhrig**, University of Augsburg, Germany
- **Osman Unsal**, Barcelona Supercomputing Center, Spain

If you have any questions about the HPCS 2011 conference paper submission, please contact Conference Program Chair: **Waleed W. Smari**, Voice: +1 (937) 681-0098, Email: [smari@arys.org](mailto:smari@arys.org) or consult the conference web site at <http://hpcs11.cisedu.info/>.