CALL FOR PAPERS
Workshop on Dependable Multi-Core Computing

As part of
The International Conference on High Performance Computing & Simulation (HPCS’09)
in conjunction with
The 5th International Wireless Communications and Mobile Computing Conference (IWCMC 2009)

Leipzig, Germany
June 21 - 24, 2009
Submission Deadline: March 22, 2009

Brief Description

The quest for high-performance has lead to a reckless competition between chip manufacturers. Only two remain which can withstand the cost pressure of fabricating 45 nm designs. Today, the integration of four cores is common - and the end of the road is not in sight. The more transistors are integrated on a chip, the more faults can be asserted. These faults can arise either during operation or in fabrication. As the fabrication costs are continuously rising, it is most important to increase the output of a fab by architectural or physical means. The
workshop addresses solutions to reach the goal of maximizing the (usable) output of a fab through dependable software or hardware designs of multi-core systems.

The Workshop supports (but is not limited to) the following topics:

- Dependable Multi-Core Architectures
- Fault Detection on the Physical Layer
- Fault-Tolerant Software Design
- Power-Aware Design
- Fault-Tolerant Hardware Design
- Fault-Tolerant HW/SW Co-Design
- On-Chip Routing/Scheduling

- Reconfigurable Computing and FPGA
- Dependability through Multi-Threading
- Fab-Aware Scheduling
- Simulation Techniques
- Trusted and Untrusted Environments

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 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 350 words. The full manuscript should be at most 7 pages using the two-column IEEE format. Additional pages will be charged at additional fee. Please include page numbers on all submissions to make it easier for reviewers to provide helpful comments. Submit a PDF copy of your full manuscript to 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 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: ------------------------------- March 22, 2009
- Acceptance Notification: -------------------------- April 10, 2009
- Camera Ready Papers and Registration Due: ------- April 24, 2009
Workshop Organizer:

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Technical Program Committee:

All submitted papers will be rigorously reviewed by the workshop technical program committee members.

Koen De Bosschere, University of Gent, Belgium
Jörg Keller, University of Hagen, Germany
Miroslaw Malek, Humboldt University of Berlin, Germany
Andre Osterloh, BTC Oldenburg, Germany
Volkmar Sieh, University of 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 conference paper submission, please contact Conference Program Chair: **Waleed W. Smari**, Dept. of Electrical and Computer Engineering, University of Dayton, 300 College Park, Dayton, OH 45469-0226, USA, Voice: (937) 229-2795, Fax: (937) 229-4529, Email: Waleed.Smari@notes.udayton.edu or consult the conference web site at [http://cisedu.us/cis/hpcs/09/main/callForPapers.jsp](http://cisedu.us/cis/hpcs/09/main/callForPapers.jsp).