PDMC 2009

8th International Workshop on Parallel and Distributed Methods in VerifiCation

November 4, 2009 – Eindhoven, Netherlands

Collocating with Formal Methods Week

The aim of the PDMC workshop series is to cover all aspects related to the verification and analysis of very large computer systems, in particular in using methods and techniques that exploit current hardware architectures, like multi-core architectures, compute clusters, external disks, graphics processing units etc.

The PDMC workshop aims to provide a working forum for presenting, sharing, and discussing recent achievements in the field of **high-performance verification**.

Topics of interest include, but are not limited to:

- multi-core/distributed model checking
- multi-threaded/distributed equivalence checking
- distributed state space generation
- slicing and distributing the state space
- parallel/distributed satisfiability checking
- parallel/distributed theorem proving
- parallel/distributed constraints solving

- parallel methods in probabilistic model checking
- parallel methods in performance evaluation
- I/O efficient algorithms for verification
- GPU accelerated verification
- distributed (libraries for) graph algorithms
- tools and case studies
- industrial applications

PDMC 2009 Special Track: Peer-to-peer and Grids in Large-Scale Computing.

The PDMC workshop 2009 will feature a special track on the mutual benefits of the verification and the P2P and GRID communities. On the one hand, P2P and Grid provide general abstractions and platforms to support the construction of large-scale distributed model checkers. On the other hand, scalable verification technology can support the design and analysis of the communication protocols needed to arrive at more dependable robust and predictable behavior of P2P and Grid systems.

Topics of interest include, but are not limited to: *GRID vs. clusters vs. SMP (heterogeneity, co-scheduling), parallelization for multi-core processors, load balancing, scalability experiments of distributed model checking algorithms on large Grids and P2P systems, using verification methods to improve robustness of Grid systems, applying verification methods to Grid and P2P protocols, distributed (randomized) data structures and algorithms.*

In addition, the PDMC workshop 2009 will be accompanied by a **PDMC industrial booth** held during the FM week.

There are four categories of submissions: **regular papers** are limited to a maximum of 10 pages (excluding bibliography and technical appendices) in postscript or PDF format (ENTCS style strongly recommended), **short tool presentations** are limited to a maximum of 5 pages, **tool demos** should provide a separate description (1-2 A4) of a poster and running demo for the industry booth, and **presentations** report on relevant results submitted to other forums or already published or on not yet finished work in progress.

The preliminary workshop proceedings will be available as a Research Report. The final proceedings appear as a volume of Electronic Notes in Theoretical Computer Science.

Invited speaker: *Gianfranco Ciardo (University of California at Riverside, USA)*

Programme Committee:

Henri E. Bal (Vrije University, Netherlands), Roberto Baldoni (University of Rome, Italy), Jiri Barnat (Masaryk University, Czech Republic), Lubos Brim (Masaryk University, Czech Republic) - Co-chair, Stefan Edelkamp (University of Bremen, Germany), Ganesh Gopalakrishnan (University of Utah, USA), Keijo Heljanko (Helsinki University of Technology, Finland), Gerard Holzmann (JPL, USA), Fabrice Huet (University of Nice, France), William Knottenbelt (Imperial College, UK), Martin Leucker (TU Munchen, Germany), Gerald Luettgen (University of York, UK), Radu Mateescu (INRIA, France), Eric Mercer (Brigham Young University, USA), Jaco van de Pol (University of Twente, Netherlands) - Co-chair, Maarten van Steen (Vrije University, Netherlands), Cesar Sanches (IMDEA Software, Spain)

Important dates:	Abstracts:	**August 1, 2009**	Notificaton:	**September 25, 2009**
	Submission:	**August 7, 2009**	Final version:	**October 15, 2009**

For more and up-to-date information see the www page `http://www.pdmc.cz/PDMC09`