# Sponsored by The Society for Modeling and Simulation International



P.O. Box 17900 San Diego, CA 92177-7900 Tel: 858-277-3888 Fax: 858-277-3930

E-mail: scs@scs.org
http://www.scs.org/

Technically Co-Sponsored by IEEE Computer Society



in Cooperation with ACM/SIGSIM



and ICST



## **Important Dates:**

Abstract Submission: Nov 25, 2011 Paper Submission: Dec 6, 2011 Notification: Jan 15, 2012 Final Paper: Feb 5, 2012

# **DEVS AWARD**

(Chair: Doohwan Kim, RTSync)
The Symposium will hold the Third
Bernard P. Zeigler DEVS M&S
Award, to recognize high-impact
innovations in M&S methods,
applications and tools. Further
details can be found in the
conference webpage.

# **DEVS PhD AWARD**

(Chair: Bernard P. Zeigler)
The Symposium will hold the First
DEVS M&S PhD Award, to recognize
and reward the best PhD thesis
related to the DEVS M&S formalism.
Further details can be found in the
conference webpage.

# **CALL FOR PAPERS**

# Symposium on Theory of Modeling and Simulation (TMS/DEVS 2012)

March 26-29, 2012 – The Florida Hotel, Orlando, Florida (USA)

## http://www.tms-devs.org

The purpose of this symposium is to provide a forum to discuss recent advancements in Theory of M&S. The main focus is on theory of modeling, methodology, practice and software to cope with the challenges arising out of these, as well as lessons learned and challenges. The Symposium bridges different areas in the field of theory of M&S, including formal modeling, model-checking, graph transformation, modeling methodologies. Topics of interest include (but are not limited to):

## Theory

- DEVS, Petri-nets, Finite State Machines, Timed Automata, Process Algebras, Queueing Networks, etc.
- Hybrid system modeling and integration of formalisms
- > Formal analysis and symbolic reasoning
- Model Checking
- O Graph and Model Transformations
- Activity paradigm: Complex adaptive systems, tracking, awareness

### M&S Software

- M&S Software, including frameworks and libraries for DEVS, Petri Nets, Finite State Machines, Timed Automata, Process algebras, Queueing Networks, etc.
- Education aspects of Theory of M&S

## Methodology

- Parallel & distributed simulators and simulations
- Interoperability simulators (grid, cloud, web services, etc.)
- M&S Engineering
- O M&S-Based development methods

#### Practice and Lessons Learned

- O Military systems and infrastructures
- Real-time and embedded systems
- High performance computing
- Cloud and service-oriented computing
- Software-intensive/networked systems
- Transportation and traffic systems
- O Ecological and environmental systems
- Systems-of-systems and ultra large scale systems
- Standards

## **Submission Procedures:**

The conference committee accepts three types of papers submitted as a **PDF file** to the conference website (<a href="http://www.softconf.com/scs/DEVS12/">http://www.softconf.com/scs/DEVS12/</a>) as listed below. The final version of all the papers must comply with the <a href="https://www.softconf.com/scs/DEVS12/">SCS conference format</a>. All papers must be original and not submitted to other venues; they will be peer reviewed with respect to their quality, originality and relevance. The authors of an accepted paper must register in advance for inclusion of their paper in the conference proceedings.

- Full manuscript: 8 pages in final conference format. In addition to publication in the conference proceedings, they will be considered for best paper award and for possible inclusion in a <u>Special Issue of the Simulation Journal (SCS)</u>. Full papers will be published both in hard copy and digital format.
- Short Papers: Papers with industrial focus, military or government applications, and work-in-progress in short paper format. Short papers are up to 6 pages in final conference format.

All papers will be included in the proceedings and archived in the <u>IEEE CS DL</u>, the <u>ACM DL</u>, and the <u>EUDL</u>.

## TMS/DEVS 2012 Organizing committee

## **Advisory Board:**

Bernard P. Zeigler (FIEEE, FSCS, LAA-SCS), University of Arizona, USA (Chair) Christos Cassandras (FIEEE, FIFAC), Boston University, USA François Cellier (FSCS), ETH Zürich, Switzerland Mo Jamshidi (FIEEE, FASME, FAAAS), University of Texas at San Antonio, USA Kishor Trivedi (FIEEE, GCM IEEE CS), Duke University, USA

# **Steering Committee:**

Reiko Heckel, University of Leicester, UK Jan Himmelspach, University of Rostock, Germany Mamadou K. Traoré, Université Blaise Pascal, Clermont-Ferrand, France

General Chairs: Gabriel A. Wainer, Carleton University, Canada

Pieter Mosterman, McGill University, Montreal, Canada; The Mathworks, USA

Program Chairs: Andrea D'Ambrogio, University of Roma TorVergata, Italy

Gregory Zacharewicz, University of Bordeaux, France

## TMS/DEVS 2012 International Technical Program Committee (to be completed)

## Theory

- o Fernando Barros, Universidade da Coimbra, Portugal
- Juan de Lara, Universidad Autónoma de Madrid, Spain
- Norbert Giambiasi, LSIS, Marseille, France
- Dan Hirsch, Intel Corp., Argentina
- Moon Ho Hwang, DS Delmia Corp., USA
- Mathias John, University of Lille, France
- o Tag Gon Kim, KAIST, Korea
- Ernesto Kofman, Universidad Nacional de Rosario, Argentina
- Hillel Kugler, Microsoft Research, UK
- Niels Lohmann, University of Rostock, Germany
- Allan McInnes, University of Canterbury, New Zealand
- Hernán Melgratti, Universidad de Buenos Aires, Argentina
- Enrico Tronci, Università di Roma "La Sapienza", Italy
- o Emilio Tuosto, University of Leicester, UK
- Lin Uhrmacher, Universität Rostock, Germany
- Hans Vangheluwe, McGill University, Canada
- Francesco Zanichelli, Universitá di Parma, Italy

## Methodology

- Maximiliano Cristia, Flowgate Consulting and CIFASIS-UNR, Argentina
- Olivier Dalle, INRIA Sophia-Antipolis and Université de Nice, France
- O Dov Dori, The William Davidson Faculty of Ind. Eng. & Management, Israel
- Mark Minas, Universität der Bundeswehr, Germany
- Lisandru Muzy, Université de Corse, France
- Libero Nigro, Universitá della Calabria, Italy
- James Nutaro, Oak Ridge National Laboratory, USA
- o Halit Oguztuzun, Middle East Technical University, Turkey
- Dorina Petriu, Carleton University, Canada
- Oliver Rose, TU Dresden, Germany
- o Hessam Sarjoughian, Arizona State University, USA
- Andreas Tolk, Old Dominion University, USA
- o Alfonso Urquia, UNED, Spain
- Antonio Vallecillo, Universidad de Málaga, Spain
- Levent Yilmaz, Auburn University, USA
- Justyna Zander, Harvard University, USA

## Practice and Lessons Learned

- Lisane Brisolara, UFPel, Brazil
- Dave Cavalcanti, Philips Research, USA
- o Scott A. Douglass, Air Force Research Laboratory, USA
- o Pau Fonseca, Polytechnic University of Catalonia, Spain
- Olaf Hagendorf, Universität Wismar, German
- o C. Anthony Hunt, UCSF, USA
- Yonglin Lei, National University of Defense Technology, China
- Xiabo Li, University of Antwerp, Belgium
- Gabriela Nicolescu, École Polytechnique de Montréal, Canada
- Lewis Ntaimo, Texas A&M, USA
- Thorsten Pawletta, Universität Wismar, Germany
- o Sabri Pllana, University of Vienna, Austria
- Jose Luis Risco-Martin, Universidad Complutense de Madrid, Spain
- o Mamadou Seck, TU Delft, Netherlands
- Martin Törngren, KTH Royal Institute of Technology, Sweden

## M&S Software

- Michele Amoretti, Università di Parma, Italy
- Alex Chow, RTSync, USA
- Jean-Baptiste Filippi, Université de Corse
- Claudia Frydman, LSIS, Marseille, France
- Xiaolin Hu, Georgia State University, USA
- Saurabh Mittal, Dunip Technologies, USA
- Hiren Patel, University of Waterloo, Canada
- Herbert Prähofer, Universität Linz, Austria
- Mohammad S. Raunak, Loyola University Maryland, USA
- Alexander Verbraeck, TU Delft, Netherlands
- o Emilia Vilani, Instituto Tecnologico de Aeronautica, Brazil