3rd International ABZ 2012 Conference

http://abzconference.org/

Abstract State Machines (ASM), Alloy, B, VDM, Z
June 18-21, 2012
Auditorium of the CNR Research Area, Pisa, Italy

Call for Papers

The ABZ 2012 conference is organized in Pisa (Italy) in conjunction with iFM 2012 and is being held in honor of Prof. Egon Börger's 65th birthday.

The ABZ conference is dedicated to the cross-fertilization of five related state-based and machine-based formal methods, Abstract State Machines (ASM), Alloy, B, VDM and Z, that share a common conceptual foundation and are widely used in both academia and industry for the design and analysis of hardware and software systems. It builds on the success of the first ABZ conference held in London in 2008, where the ASM, B and Z conference series merged into a single event, and the success of the second ABZ 2010 conference held in Orford (Canada) where the Alloy community joined the event. The novelty of the 3rd international event is the inclusion of the VDM community in the ABZ conference series.

Contributions are solicited on all aspects of the theory and applications of ASMs, Alloy, B, VDM, Z approaches in software/hardware engineering, including the development of tools and industrial applications. The program spans from theoretical and methodological foundations to practical applications, emphasizing system engineering methods and tools that are distinguished by mathematical rigour and have proved to be industrially viable. The main goal of the conference is to contribute to the integration of accurate state- and machine-based system development methods, clarifying their commonalities and differences to better understand how to combine different approaches for accomplishing the various tasks in modeling, experimental validation, mathematical verification of reliable high-quality hardware/software systems.

Although organized as a single, integral event, editorial control of the joint conference remains vested in five separate program committees, which will respectively determine its ASM, Alloy, B, VDM and Z content, to be presented in parallel conference tracks with a schedule to allow the participants to switch between the sessions. Proposals are invited for workshops and tutorials to take place the day before the main conference.

Two kinds of contributions are invited:

- **Research papers**: full papers of not more than 14 pages in LNCS format, which have to be original, unpublished and not submitted elsewhere.
- **Short presentations** of work in progress, industrial experience reports and tool demonstrations. This is an excellent opportunity for Ph.D. students to present and validate their work in progress. It is also an interesting option for industrial practitioners who sometimes face too many constraints to prepare a full paper. An extended abstract of not more than 4 pages is expected and will be reviewed. A volume of accepted extended abstracts will be made available as a Technical Report with an ISBN number, and a 1-page abstract of each presentation will be published in the Proceedings.

Contributions should be submitted electronically in PDF at the ABZ 2012 conference Easy-Chair web site.
The papers must be prepared using the SPRINGER LNCS style. All accepted papers will be published in a volume of Springer's LNCS series to be distributed at the conference.
Journal Special Issue: an improved version of a selected number of contributions will be published in a special issue of the journal *Science of Computer Programming*.

Workshop/Tutorial Proposals

Workshops and tutorials will be associated to the main event iFM/ABZ. Proposals are solicited in areas related to the conference topics.

Workshop proposal should be sent to the **workshop chairs**:

Maurice ter Beek, ISTI-CNR, Pisa, Italy (maurice.terbeek@isti.cnr.it)
Angelo Gargantini, University of Bergamo, Italy (angelo.gargantini@unibg.it)

The **deadline for submissions** is October 15, 2011. **Notifications** will be sent by November 30, 2011
Tutorial proposal should be sent to the **tutorial chair** Jonathan P. Bowen, Museophile Limited, UK.

Invited Speakers

Prof. Egon Börger, University of Pisa, Italy
Prof. Muffy Calder, University of Glasgow, United Kingdom
Prof. Ian J. Hayes, University of Queensland, Australia

Important dates

Research paper submission: January 22, 2012
Short paper submission: February 3, 2012
Papers/abstract notification : March 1, 2012
Final Version due: March 20, 2012

Workshop proposal submissions: October 15, 2011
Workshop proposal notifications: November 30, 2011
Tutorial proposal submissions: to be announced
Main ABZ 2012 conference: June 19-21 2012

General Chairs

John Derrick, University of Sheffield, UK
Stefania Gnesi, ISTI-CNR, Pisa, Italy

Conference Chairs

Steve Reeves, University of Waikato, New Zealand
Elvinia Riccobene, University of Milan, Italy

Track Chairs

Alloy Track Chair: Sarfraz Khurshid, University of Texas at Austin, USA (khurshid@ece.utexas.edu)
ASM Track Chair: Elvinia Riccobene, University of Milan, Italy (elvinia.riccobene@unimi.it)
B Track Chair: Michael Leuschel, University of Düsseldorf, Germany (leuschel@cs.uni-duesseldorf.de)
VDM Track Chair: John Fitzgerald, Newcastle University, UK (john.fitzgerald@newcastle.ac.uk)
Z Track Chair: Steve Reeves, University of Waikato, New Zealand (stever@cs.waikato.ac.nz)

Program Committee

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Mana Taghdiri, Karlsruhe Institute of Technology, Germany
Margus Veanes, Microsoft Research, USA
Kirsten Winter, University of Queensland, Australia

The conference is supported by:

ASM User Group

Alloy User Community

Association de Pilotage des Conférences B

Overture Community (VDM)

Z User Group

For questions concerning ABZ 2012, contact **Elvinia Riccobene** (elvinia.riccobene@unimi.it) or **Steve Reeves** (stever@cs.waikato.ac.nz).