

4th International ABZ 2014 Conference

<http://www.irit.fr/ABZ2014/>

ASM, Alloy, B, TLA, VDM, Z
June 2-6, 2014
Toulouse, France

Call for Papers

LATEST NEWS

- 1- Workshops are selected and workshop papers are welcome.
 - 2- Call for tutorials is still running.
 - 3- Please, do not forget to consider to submit answers to the case study.
 - 4- Leslie Lamport is one of the keynote speakers. Other keynote speakers will be announced.
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The ABZ 2014 conference is organized in Toulouse.

The ABZ conference is dedicated to the cross-fertilization of six related state-based and machine-based formal methods, Abstract State Machines (ASM), Alloy, B, TLA, 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](http://www.abz2008.org/) (2008), where the ASM, B and Z conference series merged into a single event, the success of the second ABZ 2010 conference held in [Orford](http://pages.usherbrooke.ca/abzconference/) (Canada) where the Alloy community joined the event and the success of ABZ 2012 held in [Pisa](http://ifm-abz.isti.cnr.it/index.html) (Italy) which saw the inclusion of the VDM community. The novelty of the 4th international event is the inclusion of the TLA community in the ABZ conference series.

Contributions are solicited on all aspects of the theory and applications of ASMs, Alloy, B, TLA, 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 rigor 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 to host several formal methods with ASM, Alloy, B, TLA, VDM and Z, in a single event, editorial control of the joint conference is vested in one integrated program committee, which will respectively determine its ASM, Alloy, B, TLA, VDM and Z content, to be presented in parallel conference tracks with a schedule to allow the participants to switch between the sessions.

The 4th edition of ABZ sees the introduction of a new session dedicated to a shared real-life case study among all the methods addressed in ABZ 2014. The objective of this session is to enrich the set of case studies developed with ABZ methods with a practical and real-life case study. The aeronautical context of Toulouse led the organizers to define a real-life case study issued from this domain.

Proposals are invited for workshops and tutorials to take place the day before the main conference.

Three 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, and tool demonstrations. This is an excellent opportunity for Ph.D. students to present and validate their work in progress. An extended abstract of not more than 4 pages is expected and will be reviewed.
- **Answers to case study papers:** full papers of not more than 14 pages in LNCS format reporting on the experiments conducted with any of the state based techniques in the scope of ABZ 2014.

- **Application in industry papers** reporting on work or experiences on the application of state based formal methods in industry. An extended abstract of not more than 4 pages is expected and will be reviewed. It is also an interesting option for industrial practitioners who sometimes face too many constraints to prepare a full paper.

Contributions should be submitted electronically in PDF at the [ABZ 2014 conference Easy-Chair](https://www.easychair.org/conferences/?conf=abz2014) (<https://www.easychair.org/conferences/?conf=abz2014>) web site.

The papers must be prepared using the [SPRINGER LNCS style](http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0) (<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>). The answers to case study should be submitted electronically in PDF at the [Case study Easy-Chair](https://www.easychair.org/conferences/?conf=abz2014) (<https://www.easychair.org/conferences/?conf=abz2014>) web site.

All **research** and **short** accepted papers will be published in a volume of Springer's LNCS series. The **answers to case study** papers and the **application in industry** papers will be published in a volume of Springer's CCIS series. The two volumes will be distributed at the conference.

Journal Special Issues: an improved version of a selected number of contributions will be published in a special issue of the journal *Science of Computer Programming* for the research papers and in a special issue of the *Software Tools and Technology Transfer* journal for the answers to case study papers.

Case study session

Submissions for answers to case study are encouraged. For further details, please contact the case study session chairs.

Case study session chairs

Frédéric BONIOL, ONERA-DTIM, Toulouse, France (frederic.boniol@onera.fr)
 Virginie Wiels, ONERA-DTIM, Toulouse, France (Virginie.Wiels@onera.fr)

Selected Workshops (www.irit.fr/ABZ2014/workshop.html)

Five (5) workshops are associated to the main event ABZ. Information are available on the workshops website link www.irit.fr/ABZ2014/workshop.html. For further information, contact the workshop organizers.

1. TLA 2014: Proposal for a TLA+ community event

Workshop organizers:

- Leslie Lamport, Microsoft Research, San Francisco, USA lamport@microsoft.com
- Stephan Merz, INRIA-Lorraine, Nancy, France, stephan.merz@loria.fr
- Philippe Queinnec, INPT-ENSEEIH/IRIT, Toulouse, France, philippe.queinnec@enseeiht.fr

2. Integrated use of Methods and Tools for High-Assurance Rigorous Systems and Software Development (iHARNES)

Workshop organizers:

- Elvinia Riccobene - University of Milan, Mila, Italy elvinia.riccobene@unimi.it
- Atif Mashkoor - Software Competence Center Hagenberg, Austria atif.mashkoor@scch.at

Invited Speaker:

Prof. Egon Börger - University of Pisa, IT

3. Workshop on Tool Building in Formal Methods (2nd edition)

Workshop organizers:

- Angelo Gargantini - University of Bergamo, Bergamo, Italy angelo.gargantini@unibg.it
- Paolo Arcaini - University of Bergamo, Bergamo, Italy, paolo.arcaini@unimi.it

4. Rodin User and Developer Workshop at ABZ 2014 (2 days)

Workshop organizers:

- Michael Butler, University of Southampton, UK mjb@ecs.soton.ac.uk
- Stefan Hallerstede, University of Aarhus, Denmark sha@iha.dk
- Thierry Lecomte, ClearSy, France, thierry.lecomte@clearsy.com
- Michael Leuschel, University of Dusseldorf, Germany leuschel@cs.uni-duesseldorf.de
- Alexander Romanovsky, University of Newcastle, UK Alexander.Romanovsky@newcastle.ac.uk

- Marina Walden, - Aabo Akademi Marina.Walden@abo.fi
- Laurent Voisin, Systerel, France, laurent.voisin@systerel.fr

5. 1st International Workshop about Sets and Tools (SETS)

Workshop organizers:

- David Delahaye, Cnam, Paris, France David.Delahaye@cnam.fr
- Catherine Dubois, Ensiie, Evry, France dubois@ensiie.fr

For further information related to workshop organisation, please contact the workshop chairs.

Lugia Petre, University of Turku, Turku, Finland (Lugia.Petre@abo.fi)
 Patrizia Scandurra, University of Bergamo, Italy (patrizia.scandurra@unibg.it)
 Alexander Romanovski, University of Newcastle, Newcastle, United Kingdom
 (alexander.romanovsky@newcastle.ac.uk)

Tutorial Proposals

Tutorial proposal should be sent to the **tutorial chairs**

- Stefan Hallerstedte, University of Aarhus, Aarhus, Denmark (sha@iha.dk)
- Roozbeh Farahbod, SAP research, Karlsruhe, Germany (roozbeh.farahbod@sap.com)

The **deadline for submissions** is January 30, 2014. **Notifications** will be sent by February 28, 2014

Invited Speakers

- Leslie LAMPORT, Microsoft Research, USA.
- Other invited speakers will be announced.

Important dates

Research/Industry papers and answers to case study	January 14, 2012
Tutorial proposal submissions:	January 30, 2014
Short paper submission:	February 3, 2014
Tutorial proposal notifications:	February 28, 2014
Papers notification:	March 1, 2014
Final Version due:	March 20, 2014
Main ABZ 2012 conference:	June 2-6, 2014

Conference Chairs

Yamine AIT AMEUR, INPT-ENSEEIH, Toulouse, France (yamine@n7.fr)
 Klaus-Dieter SCHEWE, University of Linz and SCCH, Linz, Austria (Klaus-Dieter.Schewe@scch.at)

Program Committee

- Jean-Raymond Abrial, Marseille, France
- Yamine Ait Ameer, IRIT-ENSEEIH, Toulouse, France
- Richard Banach, University of Manchester, UK
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- Kerstin Eder, University of Bristol, UK
- Roozbeh Farahbod, SAP Research, Karlsruhe, Germany
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- Vincenzo Gervasi, University of Pisa, Italy
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- Uwe Glässer, Simon Fraser University, Canada
- Stefania Gnesi, CNR - Pisa, Italy
- Lindsay Groves, Wellington University, New Zealand
- Stefan Hallerstedte, University of Aarhus, Denmark
- Klaus Havelund, Jet Propulsion Laboratory/NASA, USA
- Ian J. Hayes, University of Queensland, Australia
- Rob Hierons, Brunel University, UK
- Thai Son Hoang, ETH Zürich, Switzerland
- Sarfraz Khurshid, University of Texas at Austin, USA
- Regine Laleau, University of Paris-Est, France
- Leslie Lamport, Microsoft Research, USA
- Peter Gorm Larsen, Aarhus School of Engineering, Denmark
- Thierry Lecomte, ClearSy, France
- Michael Leuschel, University of Düsseldorf, Germany
- Zhiming Liu, International institute for software technology, UNU University, Macao
- Tiziana Margaria, University of Potsdam, Germany
- Atif Mashkoor, SCCH, Linz, Austria
- Dominique Mery, Loria, Université de Lorraine, Nancy, France
- Stephan Merz, LORIA, Nancy, France
- Mohamed Mosbah, Labri, Université de Bordeaux I, Bordeaux, France
- Cesar Muñoz, NASA Langley Research Center, USA
- Uwe Nestmann, Technical University of Berlin, Germany
- Christophe Newcombe, Amazon, USA
- Jose Oliveira, Universidade do Minho, Portugal
- Luigia Petre, Abo Akademi, Turku, Finland
- Andreas Prinz, Agder University College, Norway
- Alexander Raschke, University of ULM, Germany
- Elvinia Riccobene, DTI - University of Milan, Italy
- Ken Robinson, Univ. of New South Wales, Australia
- Tom Rodeheffer, Microsoft Research, USA
- Alexander Romanovsky, University of Newcastle, UK
- Thomas Santen, European Microsoft Innovation Center, Germany
- Patrizia Scandurra, University of Bergamo, Italy
- Gerhard Schellhorn, University of Augsburg, Germany
- Klaus-Dieter Schewe, Software Competence Center Hagenberg, Austria
- Steve Schneider, University of Surrey, UK
- Colin Snook, University of Southampton, UK
- Kevin Sullivan, University of Virginia, USA
- Jing Sun, The university of Auckland, Auckland, New Zealand
- Mana Taghdiri, Karlsruhe Institute of Technology, Germany
- Bernard Thalheim, Christian Albrechts University Kiel, Germany
- Margus Veanes, Microsoft Research, USA
- Marcel Verhoef, CHESS BV, Netherlands
- Friedrich Vogt, Hamburg University of Technology, Germany
- Laurent Voisin, Systemel France
- Qing Wang, Australian National University, Australia
- Virginie Wiels, ONERA-DTIM, Toulouse, France
- Kirsten Winter, University of Queensland, Australia

For questions concerning ABZ 2014, contact **Yamine AIT AMEUR** (yamine@n7.fr) or **Klaus-Dieter SCHEWE** (Klaus-Dieter.Schewe@scch.at).