

18 - 22 June 2012

CNR Pisa, Italy

iFM 2012

Joint conference in honour of  
Egon Börger's 65th birthday  
for his contribution to state-based formal  
methods

ABZ 2012

Proceedings published by



**Formal Methods & Tools Lab**  
Institute of Information Science and  
Technologies  
Italian National Research Council



European Association for  
Theoretical Computer Science  
Italian Chapter



<http://ifm-abz.isti.cnr.it>

### IFM PROGRAM COMMITTEE

Marc Benveniste, STMicroelectronics Rousset, FR  
Eerke Boiten, University of Kent, UK  
Jonathan Bowen, Museophile Limited, UK  
Jim Davies, Oxford University, UK  
John Derrick, University of Sheffield, UK  
Jin Song Dong, National University of Singapore  
Kerstin Eder, University of Bristol, UK  
Alessandro Fantechi, Univ. Florence & CNR/ISTI, Italy  
John Fitzgerald, University of Newcastle, UK  
Andy Galloway, University of York, UK  
Einar Broch Johnsen, University of Oslo, Norway  
Rajeev Joshi, NASA Jet Propulsion Laboratory, USA  
Diego Latella, CNR/ISTI, Italy  
Michael Leuschel, University of Duesseldorf, DE  
Silvia Mazzini, Intecs S.p.A., Italy  
Michele Loreti, University of Florence, Italy  
Dominique Mery, Nancy University and LORIA, FR  
Stephan Merz, INRIA Nancy and LORIA, France  
Alexandre Mota, CIn-UFPE, Brasil  
Flemming Nielson, Technical University of Denmark  
Luigia Petre, Åbo Akademi University, Turku, Finland  
David Pichardie, INRIA Rennes, France  
Thomas Santen, Microsoft Research, Aachen, DE  
Steve Schneider, University of Surrey, UK  
Kaisa Sere, Åbo Akademi University, Turku, Finland  
Graeme Smith, University of Queensland, Australia  
Kenji Taguchi, AIST, Japan  
Helen Treharne, University of Surrey, UK  
Mirco Tribastone, LMU, Germany  
Marina Walden, Åbo Akademi Univ., Turku, Finland  
Heike Wehrheim, University of Paderborn, DE  
Kirsten Winter, University of Queensland, Australia

### IMPORTANT DATES

**Paper submission:** January 14, 2012  
**Paper notification:** March 1, 2012  
**Final version paper:** March 20, 2012  
**Poster/demo submission:** April 1, 2012

### iFM - ABZ 2012 General Chairs:

*John Derrick & Stefania Gnesi*

### iFM Programme Committee Chairs:

*Diego Latella & Helen Treharne*

### ABZ Programme Committee Chairs:

*Steve Reeves & Elvinia Riccobene*

### iFM - ABZ Finance Chair:

*Alessandro Fantechi*

### iFM - ABZ Tutorials Chair: *Jonathan Bowen*

### iFM - ABZ Workshops Chair:

*Maurice ter Beek & Angelo Gargantini*

### iFM - ABZ Posters & Tool Demo Chairs:

*Franco Mazzanti & Gianluca Trentanni*

### iFM - ABZ Organizing Committee Chair:

*Maurice ter Beek*

### Invited speakers:

*Egon Boerger*, University of Pisa, Italy  
*Muffy Calder*, University of Glasgow, UK  
*Ian J. Hayes*, Univ. of Queensland, Australia

### ABZ Track Chairs:

**ASM:** *Elvinia Riccobene*    **ALLOY:** *Sarfraz Khurshid*  
**B:** *Michael Leuschel*    **VDM:** *John Fitzgerald*  
**Z:** *Steve Reeves*

### ABZ PROGRAM COMMITTEE

Jean-Raymond Abrial, Marseille, France  
Yamine Ait-Ameur, IRIT-ENSEEIH, Toulouse, FR  
Rob Arthan, Lemma 1 Ltd., UK  
Nick Battle, Fujitsu Services, UK  
Juan Bicarregui, STFC, UK  
Dines Bjorner, DTU Informatics, Denmark  
Eerke Boiten, University of Kent, UK  
Jonathan P. Bowen, Museophile Limited, UK  
Ana Cavalcanti, University of York, UK  
David Deharbe, UFRN, Brazil  
John Derrick, University of Sheffield, UK  
Juergen Dingel, Queen's University, Canada  
Andriy Dunets, Universität Augsburg, Germany  
Steve Dunne, University of Teesside, UK  
Kerstin Eder, University of Bristol, UK

### ABZ PC (CONTINUED)

Roozbeh Farahbod, Researcher Defence, Canada  
Kathi Fisler, Worcester Polytechnic Institute, USA  
John Fitzgerald, Newcastle University, UK  
Marc Frappier, University of Sherbrooke, Canada  
Vincenzo Gervasi, University of Pisa, Italy  
Uwe Glaesser, Simon Fraser University, Canada  
Anthony Hall, independent consultant, UK  
Stefan Hallerstede, Univ. of Aarhus, Denmark  
Klaus Havelund, Jet Propulsion Lab/NASA, USA  
Ian J. Hayes, University of Queensland, Australia  
Rob Hierons, Brunel University, UK  
Thai Son Hoang, ETH Zürich, Switzerland  
Jeremy Jacob, University of York, UK  
Cliff Jones, Newcastle University, UK  
Sarfraz Khurshid, Univ. of Texas at Austin, USA  
Régine Laleau, University of Paris-Est, France  
Peter Gorm Larsen, Aarhus University, Denmark  
Daniel Le Berre, Université d'Artois, France  
Thierry Lecomte, ClearSy, France  
Michael Leuschel, Univ. of Düsselndorf, Germany  
Darko Marinov, University of Illinois, USA  
Christophe Métayer, Systereel, France  
José Oliveira, Minho University, Portugal  
Marie-Laure Potet, IMAG Grenoble, France  
Andreas Prinz, Agder University College, Norway  
Alexander Raschke, University of ULM, Germany  
Steve Reeves, Univ. of Waikato, New Zealand  
Burkhardt Renz, Univ. of Gieben-Friedberg, DE  
Elvinia Riccobene, University of Milan, Italy  
Ken Robinson, Univ. New South Wales, Australia  
Shin Sahara, RUSRUWLRQVHLQLYHUVLW  
Thomas Santen, Microsoft Research, Aachen, DE  
Patrizia Scandurra, University of Bergamo, Italy  
Gerhard Schellhorn, Univ. of Augsburg, Germany  
Klaus-Dieter Schewe, SCCH, Linz, Austria  
Steve Schneider, University of Surrey, UK  
Colin Snook, University of Southampton, UK  
Kevin Sullivan, University of Virginia, USA  
Mana Taghdiri, Karlsruhe Inst. of Technology, DE  
Bernard Thalheim, University of Kiel, Germany  
Margus Veanes, Microsoft Research, USA  
Marcel Verhoef, CHES BV, Netherlands  
Kirsten Winter, Univ. of Queensland, Australia