

# AGERE! @ SPLASH 2014

4th International Workshop on Programming based on  
Actors, Agents, and Decentralized Control

<http://soft.vub.ac.be/AGERE14/>



Oct 20

Portland, Oregon - US

## Organizer & PC Chairs

**Elisa Boix Gonzalez** - Vrije Universiteit, Brussel, Belgium  
**Philipp Haller** - Typesafe  
**Alessandro Ricci** - University of Bologna, Italy  
**Carlos Varela** - Rensselaer Polytechnic Institute, USA

**Gul Agha**, University of Illinois at Urbana-Champaign, USA

**Marjan Sirjani**, Reykjavik University, Iceland

**Tom Van Cutsem**, Alcatel-Lucent, Belgium

**Samira Tasharofi**, Microsoft, USA

**Travis Desell**, University of North Dakota, USA

**Wei-Jen Wang**, National Central University, Taiwan

**Tony Garnock-Jones**, Northeastern University, USA

**Ethan Jackson**, Microsoft Research, USA

**Einar Broch Johnsen**, University of Oslo, Norway

**Akinori Yonezawa**, Riken AICS, Japan

**Jean-Pierre Briot**, CNRS Brazil, LIP6 France

**Rafael Bordini**, FACIN-UFRS, Brazil

**Danny Weyns**, Linnaeus University Sweden

**Amal El Fallah Segrouchni**, LIP6, Paris, France

**Takuo Watanabe**, Tokyo Institute of Technology, Japan

**Assaf Marron**, Weizmann Institute of Science, Israel

**Nadeem Jamali**, University of Saskatchewan, Canada

**Gul Agha**, University of Illinois at Urbana-Champaign, USA

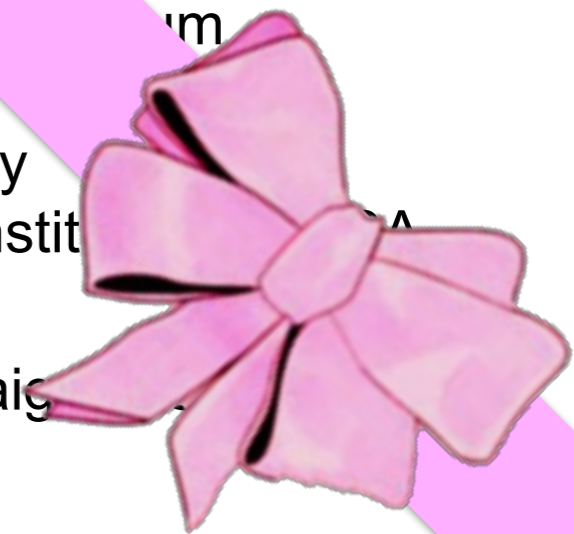
**Rafael H. Bordini**, FACIN-PUCRS, Brazil

**Assaf Marron**, Weizmann Institute of Science, Israel

**Alessandro Ricci**, University of Bologna, Italy

## Program Committee

## Steering Committee



*āgā, āgis, egi, actum, āgĕre*

latin verb meaning “to act, to lead, to do”

common root for

*actors*

*agents*

the workshop is about

computing & programming paradigms based on  
actor-oriented & agent-oriented abstractions

...and on any paradigm promoting a *decentralized  
control mindset* in design and programming

- programming languages
- computing & programming models and architectures
- platforms and tools
- applications
- design aspects & methodologies
- ...

OOPSLA's topics but  
focusing on actors, agents  
and decentralized control approaches  
as programming paradigms  
evolution of the OOP one.

# AGENDA

- 8:35 - 9:35 - Invited Talk
  - ▶ Upgrade Programming for Mobile Cloud  
(Gul Agha)
- 9:35 - 10:00 - Full-paper Session I
  - ▶ Selectors:Actors with Multiple Guarded Mailboxes  
(Shams Imam and Vivek Sarkar)

# AGENDA

- 10:30 - 12:00 - Full-paper Session II
  - ▶ Fault Tolerant Distributed Computing using Asynchronous Local Checkpointing  
(Phillip Kuang, John Field and Carlos A. Varela)
  - ▶ Scaling-Up Behavioral Programming: Steps from Basic Principles to Application Architectures  
(David Harel and Guy Katz)
  - ▶ Multiple Inheritance in AgentSpeak(L)-style Programming Languages  
(Dhaon Akshat and Rem Collier)
  - ▶ From Actor Event-Loop to Agent Control-Loop - Impact on Programming  
(Alessandro Ricci)

# AGENDA

- 13:30 - 15:00 - Full-paper Session III
  - ▶ CAF - The C++ Actor Framework for Scalable and Resource-efficient Applications  
(Dominik Charousset, Raphael Hiesgen and Thomas Schmid)
  - ▶ An Automatic Actors to Threads Mapping Technique for JVM-based Actor Frameworks  
(Ganesha Upadhyaya and Hridayesh Rajan)
  - ▶ Event-based Analysis of Timed Rebeca Models using SQL  
(Brynjar Magnusson, Ehsan Khamespanah, Marjan Sirjani and Ramtin Khosravi)
  - ▶ Efficient TCTL Model Checking Algorithm for Timed Actors  
(Ehsan Khamespanah, Ramtin Khosravi and Marjan Sirjani)

# AGENDA

- 15:30 - 16:00 - Short papers & posters advertisement
  - ▶ [Savina - An Actor Benchmark Suite](#)  
(Shams Imam and Vivek Sarkar)
  - ▶ Posters
    - [Composita: Bringing Order to Agent Communications](#)  
(Luc Bläser)
    - [Modular Reasoning in Capsule](#)  
(Mehdi Bagherzadeh and Hridayesh Rajan)
    - [Supporting Relative Location Constraints in Actor Systems](#)  
(Hua Zhang, Xinghui Zhao and Nadeem Jamali)



# AGENDA

- 16:00 - 16:50 - Brainstorm and discussion session
  - ▶ open discussion about the papers and the topics of the day
  - ▶ triggering new topics, issues, proposals
- 16:50 - 17:00 - Wrap-up and Closing remarks
  - ▶ ACM DL
  - ▶ special issue
  - ▶ next AGERE!

# PRESENTATIONS AND TIMING

- 4 full-papers in 90 minutes =>
  - ▶ about 22 minutes for each paper
    - 15-20 minutes for each paper  
+ short questions
  - ▶ full questions and discussion during the brainstorming session
- please send your slides to [a.ricci@unibo.it](mailto:a.ricci@unibo.it)

**ENJOY**

**CONTRIBUTE**