

# **REBLS 2018**

5TH WORKSHOP ON REACTIVE AND EVENT-BASED LANGUAGES & SYSTEMS CO-LOCATED WITH SPLASH 2018

#### **DEADLINES**

#### CALL FOR PAPERS

Aug  $17^{th}$  - Submission Sep  $25^{th}$  - Notification

### PROGRAMME COMMITTEE

Francisco Sant'Anna (chair) Rio de Janeiro State University, Brazil

Adrien Guatto
University of Bamberg, Germany

Aggelos Biboudis EPFL, Switzerland

Antony Courtney Facebook, USA

Dominique Devriese KU Leuven, Belgium

Hidehiko Masuhara Tokyo Institute of Technology, Japan

José Proença University of Minho, Portugal

Louis Mandel

Steven Smyth Kiel University, Germany

Tetsuo Kamina Oita University, Japan

Tim Felgentreff
Oracle Labs, Potsdam, Germany

Tomoyuki Aotani Tokyo Institute of Technology, Japan

Yoshiki Ohshima Japan

## STEERING COMMITTEE

Guido Salvaneschi TU Darmstadt, Germany

Wolfgang De Meuter Vrije Universiteit Brussel, Belgium

Patrick Eugster
TU Darmstadt and Purdue
Germany, USA

Lukasz Ziarek SUNY Buffalo, USA Reactive programming and event-based programming are two closely related programming styles that are becoming ever more important with the advent of advanced HPC technology and the ever increasing requirement for our applications to run on the web or on collaborating mobile devices. A number of publications on middleware and language design — so-called reactive and event-based languages and systems (REBLS) — have already seen the light, but the field still raises several questions. For example, the interaction with mainstream language concepts is poorly understood, implementation technology is in its infancy and modularity mechanisms are almost totally lacking. Moreover, large applications are still to be developed and patterns and tools for developing reactive applications is an area that is vastly unexplored.

We welcome all submissions on reactive programming, aspectand event-oriented systems, including but not limited to:

- Language design, implementation, runtime systems, program analysis, software metrics, patterns and benchmarks.
- Study of the paradigm: interaction of reactive and eventbased programming with existing language features such as object-oriented programming, mutable state, concurrency.
- Advanced event systems, event quantification, event composition, aspect-oriented programming for reactive applications.
- Functional-reactive programming, self-adjusting computation and incremental computing.
- Synchronous languages, modeling real-time systems, safetycritical reactive and embedded systems.
- Applications, case studies that show the efficacy of reactive programming.
- Empirical studies that motivate further research in the field.
- · Patterns and best-practices.
- Related fields, such as complex event processing, reactive data structures, view maintenance, constraint-based languages, and their integration with reactive programming. IDEs, Tools.
- Implementation technology, language runtimes, virtual machine support, compilers.
- Modularity and abstraction mechanisms in large systems.
- Formal models for reactive and event-based programming.

https://2018.splashcon.org/track/rebls-2018-papers