

Welcome to EXE 2016

2nd International Workshop on Executable Modeling
October 3, 2016, Saint-Malo, France

Organizers:

Tanja Mayerhofer
TU Wien, Austria

Philip Langer
EclipseSource, Austria

Ed Seidewitz
nMeta, USA

Jeff Gray
University of Alabama, USA

Context

Potentials of executable modeling

- Provide abstractions of complex system behavior
- Allow performance of early analyses of complex system behavior
- Provide support for design, comprehension, discovery, validation, and verification of system behavior

Challenges of executable modeling

- Lack of maturity of techniques and tooling for executable modeling
- Limited experience with executable modeling in software development industry

Aim

- Highlight potentials and challenges of executable modeling
- Assess and advance the state-of-the-art in executable modeling
- Bring together researchers and practitioners working in executable modeling
- Exchange recent results, ideas, opinions, and experiences
- Coordinate research efforts

Topics

- **Engineering methods for executable modeling languages**
- Model execution tools
- **Case studies and experience reports on the adoption of executable modeling**
 - Empirical investigations and evaluations of model execution tools
 - Executable modeling in education
- **Automation techniques for the development of model execution tools**
 - Evolution in the context of executable modeling
 - Semantic conformance
- **Customization of executable modeling languages and model execution tools**
- **Composition, extension, and reuse of executable modeling languages and tools**
 - Integration of executable modeling languages and programming languages
 - Semantics-aware model transformations and code generation
- **Scalability of model execution and execution-based model analysis**
 - Execution of partial and underspecified models
- **Model execution in the presence of non-determinism and concurrency**
 - Surveys and benchmarks of different executable modeling approaches

Program

9:15 – 10:30 Keynote (Chair: Ed Seidewitz)

Executable Modeling: Retrospective and Prospective

Stephen Mellor

10:30 – 11:00 Coffee Break

11:00 – 12:30 Session 2 (Chair: Philip Langer)

Defining Semantic Variations of Diagrammatic Languages Using Behavioral Programming and Queries

Michael Bar-Sinai, Gera Weiss and Assaf Marron

Concurrency-Aware Executable Domain-Specific Modeling Languages as Models of Concurrency

Florent Latombe, Xavier Crégut and Marc Pantel

Interactive Debugging for Extensible Languages in Multi-Stage Transformation Environments

Domenik Pavletic and Kim Haßlbauer

Program

12:30 – 14:00 Lunch Break

14:00 – 15:30 Session 3 (Chair: Tanja Mayerhofer)

xtUML: Current and Next State of a Modeling Dialect (Experience Report)

Cortland Starrett

Local Optimizations in Eclipse QVTc and QVTr Using the Micro-Mapping Model of Computation

Edward Willink

SimQRi: A Query-Oriented Tool for the Efficient Simulation and Analysis of Process Models (Tool Demonstration)

Christophe Ponsard, Quentin Boucher and Gustavo Ospina

Resource Analysis and Automated Verification For The Thirty Meter Telescope Using Executable SysML Models (Invited Talk)

Nerijus Jankevicius

Program

15:00 – 15:30 Coffee Break

16:00 – 17:30 Session 4 (Chair: Jeff Gray)

Leveraging Executable Language Engineering for Domain-Specific Transformation Languages (Position Paper)

Erwan Bousse, Manuel Wimmer, Wieland Schwinger and Elisabeth Kapsammer

On the Executable Nature of Models (Position Paper)

Eric Cariou, Olivier Le Goer and Franck Barbie

16:30 – 17:30 Plenary Discussion

Plenary Discussion

You have ...

... a question that is still unanswered?

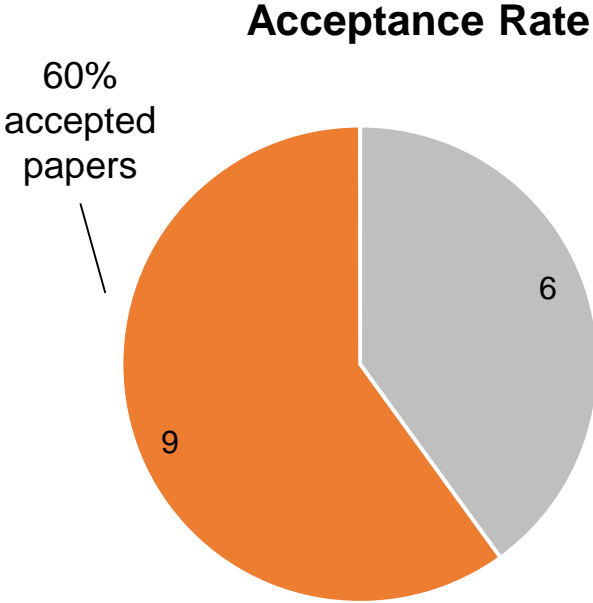
... a thought or idea to share?

→ Write it down for the plenary discussion or post it at

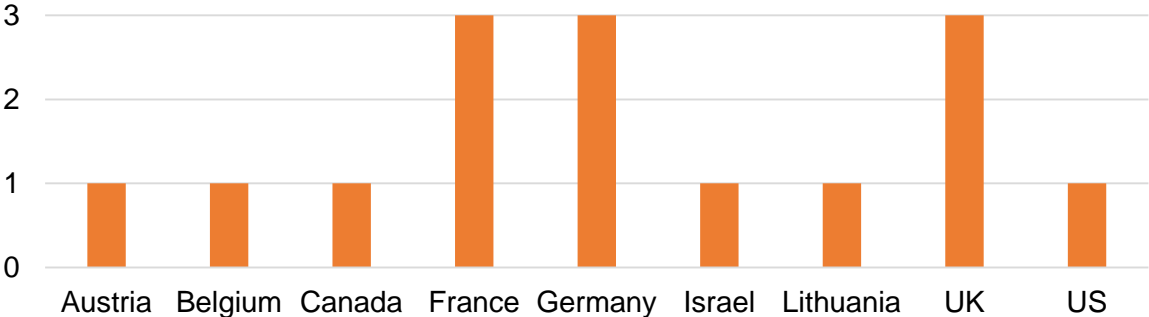
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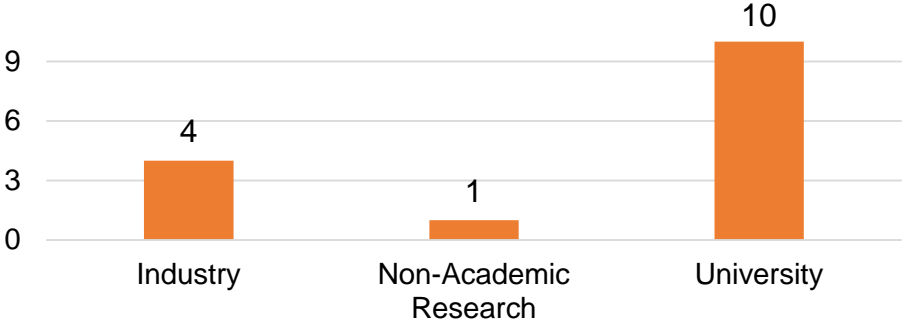
Statistics about Submissions



Number of Submissions per Country



Number of Submissions per Organization Type



Program Committee

Colin Atkinson

Peter Clarke

Martin Gogolla

Zoltan Micskei

Jesús Sánchez Cuadrado

Eugene Syriani

Hans Vangheluwe

Francis Bordeleau

Benoit Combemale

Timothy Lethbridge

Richard Paige

Markus Scheidgen

Jérémie Tatibouët

Jordi Cabot

Julien Deantoni

Nicholas Matragkas

Alessandro Romero

Bran Selic

Massimo Tisi

Tony Clark

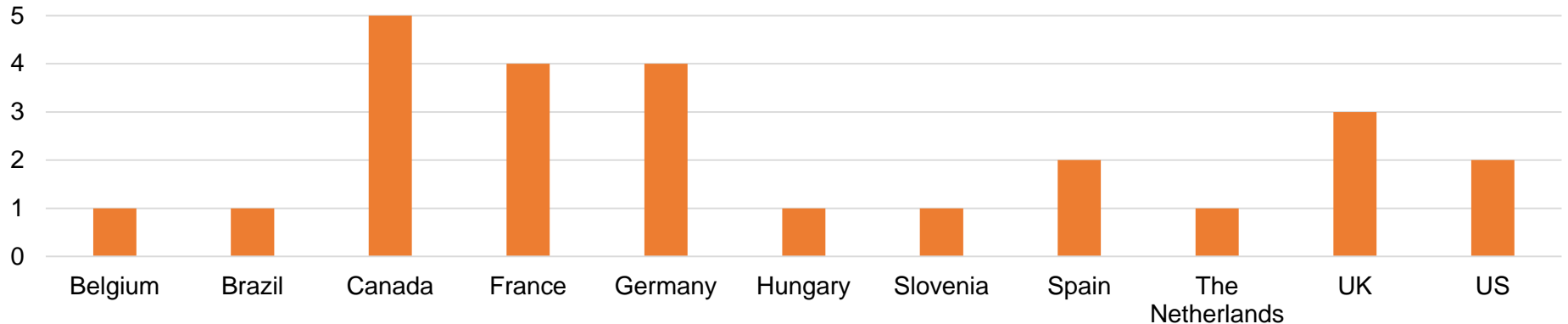
Juergen Dingel

Marjan Mernik

Bernhard Rumpe

Cortland Starrett

Mark Van Den Brand



Publication of Resources

Pre-proceedings

- Pre-workshop version of papers are available at <http://www.modelexecution.org/exe2016>

Post-proceedings

- Revised papers will be published on CEUR: <http://ceur-ws.org>
- Deadline for camera-ready versions: November 4th (instructions will follow)
- Submission system: <https://easychair.org/conferences/?conf=exe2016>

Presentations

- Will be available at <http://www.modelexecution.org/exe2016>
- Please send a copy of your slides to exe2016@modelexecution.org