

18th International Workshop on Formal Methods for Industrial Critical Systems**Monday, 23 September**

09:45

Welcome

10:00

10:00

Keynote 1 (jointly with FM-RAIL-BOK)

11:00

Alessandro Fantechi, Università di Firenze: *Twenty-Five Years of Formal Methods and Railways: What Next?*

11:00

Coffe Break

11:30

11:30

Session 1 - Safety and Reliability

13:00

Chair: Benjamin Monate

- Hallstein Asheim Hansen, *HyRev: A tool for the automatic generation of real-time routines for enabling fail-safe control in a class of safety-critical embedded systems using backwards reachability analysis*
- Adil Khurram, Haider Ali, Arham Tariq and Osman Hasan, *Formal Reliability Analysis of Protective Relays in Power Distribution Systems*
- Adrien Champion, Rémi Delmas, Michael Dierkes, Pierre-Loïc Garoche, Romain Jobredeaux and Pierre Roux, *Formal Methods for the Analysis of Critical Control Systems Models: Combining Non-Linear and Linear Analyses*

13:00

Lunch

14:30

14:30

Session 2 - Programmable Devices

16:00

Chair: Charles Pecheur

- Helene Leroux, Karen Godary-Dejean and David Andreu, *Complex Digital System Design: a methodology and its application to medical implants*
- Laurence Pierre, Fabrice Pancher, Rodolphe Suescun and Jérôme Quévremont, *On the Effectiveness of Assertion-Based Verification in an Industrial Context*
- Sebastian Biallas, Mirco Giacobbe and Stefan Kowalewski, *Predicate Abstraction for Programmable Logic Controllers*

16:00

Coffee Break

16:30

16:30

Session 3 - Consistency

17:30

Chair: Radu Mateescu

- Christoph Zengler and Wolfgang Kuechlin, *Boolean Quantifier Elimination for Automotive Configuration - A Case Study*
- Paul Jackson, Florian Schanda and Angela Wallenburg, *Auditing User-Provided Axioms in Software Verification Conditions*

21:00

Workshop Dinner**Tuesday, 24 September**

09:45

Welcome

10:00

10:00

Keynote 2

11:00

Benjamin Monate, TrustInSoft: *TrustInSoft: Industrial Formal Methods to Protect Security-Sensitive Systems*

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11:00

Coffee Break

11:30

11:30

Session 4 - Feedback from Industrial Applications

Chair: Michael Dierkes

13:00

- Jennifer Davis, Matthew Clark, Darren Cofer, Aaron Ficarek, Jacob Hinchman, Jonathan Hoffman, Brian Hulbert, Steven Miller and Lucas Wagner, *Study on the Barriers to the Industrial Adoption of Formal Methods*
- Christophe Ponsard, Jean-Christophe Deprez and Renaud De Landtsheer, *Manager Guidelines for the Industrial Deployment of Formal Methods*
- Darren Sexton, *An Outline Workflow for Practical Formal Verification from Software Requirements to Object Code*

13:00

Lunch

14:30

14:30

Session 5 - Protocol Analysis

Chair: Alessandro Fantechi

15:30

- Abderahman Kriouile and Wendelin Serwe, *Formal Analysis of the ACE Specification for Cache Coherent Systems-on-Chip*
- Aurel Randolph, Abdessamad Imine, Hanifa Boucheneb and Alejandro Quintero, *Specification and Verification using Alloy of Optimistic Access Control for Distributed Collaborative Editors*

15:30

Closing

16:00

16:00

Coffee Break

16:30

16:30

FMICS Management Meeting (Members only)

18:00