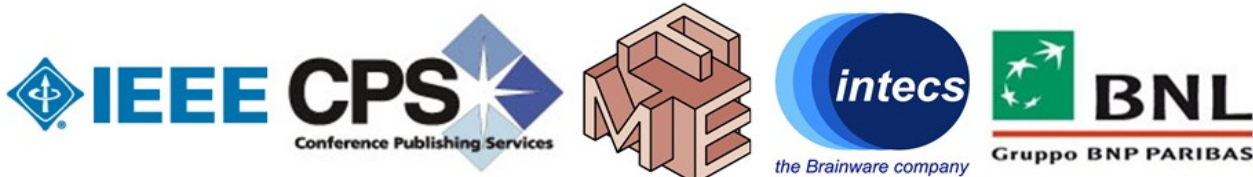


8th IEEE International Conference on Software Engineering and Formal Methods

SEFM²⁰¹⁰ Conference Programme



13 - 18 September 2010 - CNR, Pisa, Italy



Program at a glance

| Monday September 13 2010 | | Tuesday September 14 2010 | | Wednesday September 15 2010 | | Thursday September 16 2010 | | Friday September 17 2010 | | Saturday September 18 2010 | |
|--------------------------------|-----------------------------------|---------------------------------|-----------------------------------|-----------------------------------|---|----------------------------------|-----------------------------------|--------------------------------|------------------------|----------------------------------|-----------------|
| 09.00 10.30 | T1 T3 | 09.00 09.15 | Opening | 09.00 10.00 | Invited Talk | 09.00 10.00 | Invited Talk | 09.00 10.20 | W1 W2 W3 W4 | 09.00 10.20 | W2 W3 |
| | | 09.15 10.15 | Invited Talk | | | | | | | | |
| 10.30 11.00 | Coffee break | 10.15 10.45 | Coffee break | 10.00 10.30 | Coffee break | 10.00 10.30 | Coffee break | 10.20 11.00 | Coffee break | 10.20 11.00 | Coffee break |
| 11.30 13.00 | T1 T3 | 10.45 12.45 | Session 1 | 10.30 12.30 | Session 4 | 10.30 12.30 | Session 6 - W1 | 11.00 13.00 | W1 W2 W3 W4 | 11.00 13.00 | W2 W3 |
| 13.00 14.30 | Lunch Poster and tool demos | 12.45 14.00 | Lunch Poster and tool demos | 12.30 13.45 | Lunch Poster and tool demos | 12.30 13.45 | Lunch Poster and tool demos | 13.00 14.30 | Lunch | 13.00 14.30 | Lunch |
| 14.30 16.00 | T2 T4 | 14.00 16.00 | Session 2 | 13.45 15.30 | Session 5 | 13.45 15.45 | Session 7 - W1 | 14.30 15.20 | W1 W2 W3 | 14.30 15.20 | W2 W3 |
| 16.00 16.30 | Coffee break | 16.00 16.30 | Coffee break | 15.30 16.00 | Coffee break | 15.45 16.15 | Coffee break | 15.20 16.00 | Coffee break | 15.20 16.00 | Coffee break |
| 16.30 18.30 | T2 T4 | 16.30 18.00 | Session 3 | 16.30 23.45 | EXCURSION TO LUCCA SOCIAL DINNER | 16.15 17.30 | Session 8 - W1 | 16.00 18.00 | W1 W2 W3 | 16.00 18.00 | W2 W3 |
| 19.00 21.00 | WELCOME RECEPTION | | | | | 17.45 18.00 | Closing | | | | |

Monday September 13rd

| | | |
|--------------------|--|--|
| 8.30 9.00 | Registration | |
| 9.00 10.30 | Tutorial 1 Structured Wide-Area Programming by Jayadev Misra | Tutorial 3 Outsourcing vs. Compliance in Software Service Viewpoint by Yudistira Asnar, Andrea Micheletti and Fabio Massacci |
| | Room 27 | Room 28 |
| 10.30 11.00 | Coffee Break Room 29 | |
| 11.30 13.00 | Tutorial 1 Structured Wide-Area Programming by Jayadev Misra | Tutorial 3 Outsourcing vs. Compliance in Software Service Viewpoint by Yudistira Asnar, Andrea Micheletti and Fabio Massacci |
| | Room 27 | Room 28 |
| 13.00 14.30 | Lunch Room 29 | |
| 14.30 16.00 | Tutorial 2 Can we Computerize an Elephant? by David Harel | Tutorial 4 Multi-dimensional Co-engineering of Autonomous Systems by Manuela L. Bujorianu and Brian White |
| | Room 27 | Room 28 |
| 16.00 16.30 | Coffee Break Room 29 | |
| 16.30 18.30 | Tutorial 2 Can we Computerize an Elephant? by David Harel | Tutorial 4 Multi-dimensional Co-engineering of Autonomous Systems by Manuela L. Bujorianu and Brian White |
| | Room 27 | Room 28 |
| 19.00 21.00 | Welcome Reception | |

Tuesday September 14th

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|--------------|--------------|--|----------------|
| 8.30 | 9.00 | Registration | |
| 9.00 | 9.15 | Opening | |
| 9.15 | 10.15 | Invited speaker Adaptive Software Needs Continuous Verification Carlo Ghezzi Chair: Andrea Maggiolo-Schettini -- Auditorium | |
| 10.15 | 10.45 | Coffee Break | Room 29 |
| 10.45 | 12.45 | Session 1 Formal Requirement Analysis and Specification Chair: Dominique Méry Auditorium | |
| 10.45 | 11.15 | Non-local Choice and Implied Scenarios Haitao Dan, Rob Hierons and Steve Counsell | |
| 11.15 | 11.45 | temporaljmlc: A JML Runtime Assertion Checker Extension for Specification and Checking of Temporal Properties Faraz Hussain and Gary Leavens | |
| 11.45 | 12.15 | User Queries for Specification Refinement Treating Shared Aspect Join Points Emilia Katz and Shmuel Katz | |
| 12.15 | 12.45 | Assessing the Quality of B Models Adrien de Kermadec, Frederic Dadeau and Fabrice Bouquet | |
| 12.45 | 14.00 | Lunch | Room 29 |
| | | Posters and Tool Demo Session in Room 28 | |
| 14.00 | 16.00 | Session 2 - Chair: (tbd) Special track in memory of Geoff Dromey Chair: Antonio Cerone Auditorium | |
| 14.00 | 14.40 | Behavior Trees: from Systems Engineering to Software Engineering Peter Lindsay | |
| 14.40 | 15.20 | Behavior Engineering - A Scalable Modeling and Analysis Method Daniel Powell | |
| 15.20 | 16.00 | Integrating Requirements: The Behavior Tree Approach Kirsten Winter, Ian J. Hayes and Robert Colvin | |
| 16.00 | 16.30 | Coffee Break | Room 29 |
| | | Posters and Tool Demo Session in Room 28 | |

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| 16.30 18.00 | Session 3 Program analysis | |
| | Chair: Mizuhito Ogawa | Auditorium |
| 16.30 17.00 | Assertion-based Slicing and Slice Graphs José Barros, Daniela da Cruz, Pedro Rangel Henriques and Jorge Sousa Pinto | |
| 17.00 17.30 | Architecture Recovery using Latent Semantic Indexing and K-Means: an Empirical Evaluation Michele Risi, Giuseppe Scanniello and Genoveffa Tortora | |
| 17.30 17.45 | A Method for Testing Software Systems Based on State Design Pattern using Symbolic Execution Cristina Tudose and Radu Oprisa | |
| 17.45 18.00 | A Toolkit for Generating Sentences from Context-Free Grammars Zhiwu Xu, Lixiao Zheng and Haiming Chen | |

Wednesday September 15th

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| 9.00 10.00 | Invited speaker Fly Me to the Moon: Verification of Aerospace Systems Dimitra Giannakopoulou | |
| | Chair: José Luis Fiadeiro | Auditorium |

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| 10.00 10.30 | Coffee Break | Room 29 |
| | Posters and Tool Demo Session in Room 28 | |

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| 10.30 12.30 | Session 4 Formal approaches to service-oriented computing | |
| | Chair: Carlo Montangero | Auditorium |
| 10.30 11.00 | Timed Data-centric Analysis of Graphical Business Process Models Natallia Kokash, Christian Krause and Erik de Vink | |
| 11.00 11.30 | A Formal Model for Work Flows Christian Leuxner, Bernd Spanfelner and Wassiou Sitou | |
| 11.30 12.00 | Back-annotation of Simulation Traces with Change-Driven Model Transformations Ábel Hegedüs, Gábor Bergmann, István Ráth and Daniel Varro | |
| 12.00 12.30 | Designing Log Architectures for Legal Evidence Eduardo Mazza, Daniel Le Métayer and Maire-Laure Potet | |

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| 12.30 13.45 | Lunch | Room 29 |
| | Posters and Tool Demo Session in Room 28 | |

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| 13.45 15.30 | Session 5 Applications of formal methods | |
| | Chair: Franco Mazzanti | Auditorium |
| 13.45 14.15 | A Scalable Fluid Flow Process Algebraic Approach to Emergency Egress Analysis Mieke Massink, Diego Latella, Michael Harrison and Andrea Bracciali | |
| 14.15 14.45 | Safety assessment using Behavior Trees and Model Checking Peter Lindsay, Kirsten Winter and Nisansala Yatapanage | |
| 14.45 15.15 | Model Checking Ad Hoc Network Routing Protocols: ARAN vs. endairA Davide Benetti, Massimo Merro and Luca Viganò | |
| 15.15 15.30 | Refinement-Friendly Bigraphs and Spygraphs Michael Goldsmith and Sadie Creese | |

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| 15.30 16.00 | Coffee Break Room 29 | |
| | Posters and Tool Demo Session in Room 28 | |

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| 16.00 23.45 | Social Event - Trip to Lucca Visit of the town and Social Dinner | |
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Thursday September 16th

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| 9.00 10.00 | Invited speaker (JOINT TALK WITH FAST) On unreasonable ineffectiveness of security engineering Dusko Pavlovic | |
| | Chair: Stefania Gnesi | Auditorium |

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| 10.00 10.30 | Coffee Break Room 29 | |
| | Posters and Tool Demo Session in Room 28 | |

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| 10.30 12.30 | Session 6 Model checking | |
| | Chair: Peter Lindsay | Auditorium |
| 10.30 11.00 | Verification of Dynamic Data Tree with μ-Calculus extended with Separation Maria-del-Mar Gallardo and David Sanan | |
| 11.00 11.30 | Parallel Partial Order Reduction with Topological Sort Proviso Jiri Barnat, Lubos Brim and Petr Rockai | |
| 11.30 12.00 | Structured Counterexamples for the Temporal Description Logic ALCCTL Franz Weigl, Shin Nakajima and Burkhard Freitag | |
| 12.00 12.30 | SMT-based Verification of LTL Specifications with Integer Constraints and its Application to Runtime Checking of Service Substitutability Marcello M. Bersani, Luca Cavallaro, Achille Frigeri, Matteo Pradella and Matteo Rossi | |

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| 12.30 13.45 | Lunch | Room 29 |
| | Posters and Tool Demo Session in Room 28 | |

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| 13.45 15.45 | Session 7 Formal approaches for testing | |
| | Chair: Rob Hierons | Auditorium |
| 13.45 14.15 | Testing Web Service Orchestrators in context: a symbolic approach Jose Pablo Escobedo, Christophe Gaston, Pascale Le Gall and Ana Cavalli | |
| 14.15 14.45 | Pruning Testing Trees in the Test Template Framework by Detecting Mathematical Contradictions Maximiliano Cristia, Pablo Albertengo and Pablo Rodriguez Monetti | |
| 14.45 15.15 | Combinatorial Testing for VDM Peter Gorm Larsen, Kenneth Lausdahl and Nick Battle | |
| 15.15 15.45 | Synthesize it: from Design by Contract to Meaningful Test Input Data Stefan Galler, Martin Weighlofer and Franz Wotawa | |

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| 15.45 16.15 | Coffee Break | Room 29 |
| | Posters and Tool Demo Session in Room 28 | |

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| 16.15 17.30 | Session 8 Formal methods for real-time and timed analysis | |
| | Chair: Gerardo Schneider | Auditorium |
| 16.15 16.45 | TART: Timed-Automata to Real-Time Java Tool Niusha Hakimipour, Paul Strooper and Andy Wellings | |
| 16.45 17.00 | Towards the Semi-Automatic Verification of Parameterized Real-Time Systems using Network Invariants Thomas Goethel and Sabine Glesner | |
| 17.00 17.15 | A Timed Model of Circus with the Reactive Design Miracle Kun Wei, Jim Woodcock and Alan Burns | |
| 17.15 17.30 | Static Enforcement of Service Deadlines Massimo Bartoletti and Roberto Zunino | |

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| 17.30 18.00 | Closing Session | |
| 17.30 17.45 | SEFM 2011 - Gerardo Schneider | |
| 17.45 18.00 | Closing | |

September 16th - 17th - 18th

| Workshops | |
|---|--------------|
| Rooms: 27 28 30 C-29 | |
| Thursday September 16th | |
| 8.30 | 9.00 |
| Workshops Registration * | |
| 9.00 | 18.00 |
| W1: FAST | |
| 7th International Workshop on Formal Aspects of Security & Trust - Pierpaolo Degano (Univ. of Pisa, Italy), Sandro Etalle (TU Eindhoven and Univ. of Twente, NL), Joshua Guttman (Worcester Polytechnic Inst., USA) | |
| Room: 27 | |
| Friday September 17th | |
| 8.30 | 9.00 |
| Workshops Registration * | |
| 9.00 | 18.00 |
| W1: FAST | |
| 7th International Workshop on Formal Aspects of Security & Trust - Pierpaolo Degano (Univ. of Pisa, Italy), Sandro Etalle (TU Eindhoven and Univ. of Twente, NL), Joshua Guttman (Worcester Polytechnic Inst., USA) | |
| Room: 27 | |
| 9.00 | 18.00 |
| W2: FLACOS | |
| 4th Workshop on Formal Languages and Analysis of Contract-Oriented Software - Antonio Brogi (Univ. of Pisa, Italy), Gerardo Schneider (Univ. of Gothenburg, Sweden) | |
| Room: 28 | |
| 9.00 | 18.00 |
| W3: Open Cert | |
| 4th International Workshop on Foundations and Techniques for Open Source Software Certification - Luis Barbosa (Universidade do Minho, Portugal), Antonio Cerone (UNU-IIST, United Nations University, Macau SAR China), Siraj Shaikh (Coventry University, UK) | |
| Room: 30 | |
| 9.00 | 13.00 |
| W4: FM+AM | |
| 2nd Workshop on Formal Methods and Agile Methods - Stefan Gruner (Univ. of Pretoria, South Africa) | |
| (Room C-29 ("Faedo") is located at first floor: entrance 8 or 19, the follow indicators) | |
| Room: C-29 | |
| Saturday September 18th | |
| 9.00 | 18.00 |
| W2: FLACOS | |
| 4th Workshop on Formal Languages and Analysis of Contract-Oriented Software - Antonio Brogi (Univ. of Pisa, Italy), Gerardo Schneider (Univ. of Gothenburg, Sweden) | |
| Room: 28 | |
| 9.00 | 18.00 |
| W3: Open Cert | |
| 4th International Workshop on Foundations and Techniques for Open Source Software Certification - Luis Barbosa (Universidade do Minho, Portugal), Antonio Cerone (UNU-IIST, United Nations University, Macau SAR China), Siraj Shaikh (Coventry University, UK) | |
| Room: 30 | |

* Please note that on site registration for the workshops is possible only via cash payments. There are three cash dispensers available at the CNR.

September 14th - 15th - 16th

Posters and Tool Demo Session

Room 28

Fastest: a Model-Based Testing Tool for the Z Notation
Maximiliano Cristia, Pablo Albertengo and Pablo Rodriguez Monetti

Dam Management Based on Model Checking Techniques
Laura Panizo, Maria del Mar Gallardo, Pedro Merino, David Sanán and Antonio Linares

EB2C : A Tool for Event-B to C Conversion Support
Neeraj Singh and Dominique Méry

**A tool to verify, slice and animate annotated components:
GamaSlicer**
Daniela da Cruz, Pedro Henriques and Jorge Sousa Pinto

**A Preliminary Exercise of a Database Application Verification using
LinguSQL**
Ade Azurat, Rikky Wenang Purbojati, Api Perdana and Heru Suhartanto

A Petri Net-based Editor to Develop Active Rules
Lorena Chavarría-Báez and Xiaou Li

**From BPEL to SAL And Back: a Tool Demo on Back-Annotation with
VIATRA2**
Ábel Hegedüs, István Ráth and Daniel Varro

BliteC: a tool for developing WS-BPEL applications
Luca Cesari, Rosario Pugliese and Francesco Tiezzi

Overture/VDM Tool Status
Peter Gorm Larsen and Kenneth Lausdahl

