

# PUMA/RiSE Workshop 2014 Program

Sep. 29th–Oct. 3rd

## Monday

Arrival and RiSE PI meeting

## Tuesday

time	name	title
<i>chair: Jan Křetínský</i>		
9:00–9:20	Dmitriy Traytel	Derivatives of WS1S Formulas
9:20–9:40	Stephan Barth	Minimization Beyond Myhill–Nerode
9:40–10:00	Salomon Sickert	Deterministic $\omega$ -Automata for LTL-Fragments: A Mechanically Verified Construction
<i>Coffee Break</i>		
<i>chair: Helmut Seidl</i>		
10:30–10:50	Thorsten Tarrach	Regression Preventing Concurrent Program Repair
10:50–11:10	Christian Müller	Universal Information-Flow for Self-Composed Programs
11:10–11:30	Martin Chmelik	CEGAR for Qualitative Analysis of Probabilistic Systems
11:30–11:50	Christian Neukirchen	Computation of Winning Strategies for $\mu$ -Calculus by Fixpoint Iteration
11:50–12:10	Julian Kranz	Structure-Preserving Compilation: Efficient Integration of Functional DSLs into Legacy Systems
<i>Lunch</i>		
<i>chair: Helmut Veith</i>		
14:15–15:15	Azadeh Farzan	?
<i>Coffee Break</i>		
<i>chair: Ana Sokolova</i>		
16:00–16:20	Albert Rizaldi	Action-based Stochastic Logics for Markov Automata
16:20–16:40	Magdalena Widl	A SAT-based Debugging Tool for State Machines and Sequence Diagrams
16:40–17:00	Andreas Fröhlich	Stochastic Local Search for Satisfiability Modulo Theories
17:00–17:20	Ioan Dragan	Experimenting with SAT solvers in Vampire

## Wednesday

time	name	title
<i>chair: Armin Biere</i>		
9:00–9:30	Tobias Nipkow	Amortized Complexity Verified
9:30–9:50	Christoph-Simon Senjak	A Verified Implementation of the Deflate Compression Standard
09:50–10:10	Fabian Immler	Formal Verification of ODE-Solvers
10:10–10:30	Manuel Eberl	A Verified Compiler for Probability Density Functions
<i>Coffee Break</i>		
<i>chair: Roderick Bloem</i>		
11:00–11:20	Robert Königshofer	Synthesis of Safety Shields
11:20–11:40	Ayrat Khalimov	Synthesis of Cache-Coherence Protocols
11:40–12:00	Martin Aigner	ACDC-JS: Explorative Benchmarking of JavaScript Memory Management
<i>Lunch</i>		
<i>chair: Uwe Egly</i>		
14:00–14:20	Bernhard Kragl	How to Overcome the Extensional Crisis in the Life of a Theorem Prover
14:20–14:40	Johannes Oetsch	Incrementally Verifying Partial Designs with DepQBF
<i>Mini-Workshop: The Art of Empirical Evaluation</i>		
<i>chair: Helmut Seidl</i>		
14:45–15:05	Immler/Mihaila/Traytel	Benchmarking in the Presence of Timeouts
15:05–15:25	Barth/Bauer/Frielinghaus	MONA Implementation Secrets
15:25–15:45	Giacobbe/Tarrach	Large Block Encoding
<i>Coffee Break</i>		
<i>chair: Michael Luttenberger</i>		
16:15–16:35	Hoffmann/Müller/Sickert	Mathematizing C++ Concurrency
16:35–16:55	Aigner/Haas/Lippautz	Common Mistakes in Systems Benchmarking
16:55–17:15	Neukirchen/Senjak	Haskell Beats C
17:15–17:35	Rizaldi	Powertrain Control Verification Benchmark

## Thursday

time	name	title
<i>chair: Helmut Seidl</i>		
9:00–9:45	Martin Hofmann	Logical Relations and Nondeterminism
9:45–10:05	Bogdan Mihaila	Sendmail Crackaddr—Static Analysis Strikes Back
10:05–10:25	Stefan Schulze Frielinghaus	Inter-procedural Herbrand Equalities
<i>Coffee Break</i>		
<i>chair: Martin Hofmann</i>		
11:00–11:20	Sabine Bauer	The Decision Problem for Linear List Constraints
10:20–11:40	Florian Zuleger	Size-Change Abstraction and Max-Plus Automata
11:40–12:00	Mirco Giacobbe	Computing the Mutational Robustness of Gene Regulatory Networks
<i>Lunch</i>		

Hike/Social Event

## Friday

time	name	title
<i>chair: Ana Sokolova</i>		
9:00–10:00	Rodrigo Rodrigues	?
<i>Coffee Break</i>		
<i>chair: Ulrich Schöpp</i>		
10:30–10:50	Andreas Haas	Fast Linearizable Timestamped Stack
10:50–11:10	Gordon Cichon	Formal Semantics of Synchronous Transfer Architecture
11:10–11:30	Julian Brunner	Implementation and Verification of Partial Order Reduction for On-The-Fly Model Checking
11:30–11:50	Philipp Hoffmann	Negotiations as a Concurrency Primitive
<i>Lunch</i>		

Departure