

Programme of ETAPS 2025
Hamilton, Canada
May 3–8, 2025

08:45

ETAPS Opening
Room: MDCL 1305

09:00

Ina Schaefer: Correctness-by-Construction—Past, Present and Future (unifying speaker)
Room: MDCL 1305
Chair: Delia Kesner

10:00

Coffee Break
Room: MDCL

FASE: AI and Software Quality
Chair: Gordon Fraser
Room: MDCL 1309

TACAS: Program Analysis
Chair: Dirk Beyer
Room: MDCL 1102

FOSSACS: Games and Logics
Chair: Lutz Schröder
Room: MDCL 1105

RUST WORKSHOP
Room: MDCL 1009

10:30

Welcome to FASE 2025
Gordon Fraser, Artur Boronat

Inferring Incorrectness Specifications for Object-Oriented Programs
Wenhua Li, Quang Loc Le, Yahui Song and Wei-Ngan Chin

Complementation of Emerson-Lei Automata
Vojtěch Havlena, Ondrej Lengal and Barbora Šmahlíková

Charon: An Analysis Framework for Rust
Son Ho, Guillaume Boisseau, Lucas Franceschino, Yoann Prak, Aymeric Fromherz and Jonathan Protzenko

10:45

Towards Large Language Model Guided Kernel Direct Fuzzing
Xie Li, Zhaoyue Yuan, Zhenduo Zhang, Youcheng Sun and Lijun Zhang

On Stability in a Happens-Before Propagator for Concurrent Programs (Reproducibility Study)
Levente Bajczi, Csanád Telbisz, Dániel Szekeres and András Vörös

Fair Quantitative Games (Quantitative Games)
Ashwani Anand, Satya Prakash Nayak, Ritam Raha, Irmak Saglam and Anne-Kathrin Schmuck

BorrowSanitizer
Ian McCormack, Oliver Braunsdorf, Johannes Kinder, Jonathan Aldrich and Joshua Sunshine

11:00

DeepCRCEval: Revisiting the Evaluation of Code Review Comment Generation
Junyi Lu, Xiaojia Li, Zihan Hua, Lei Yu, Shiqi Chen, Li Yang, Fengjun Zhang and Chun Zuo

Performance Heuristics for GR(1) Realizability Checking and Related Analyses
Roy Yatskan, Ilia Shevrin and Shahar Maoz

Quantifier Elimination and Craig Interpolation: The Quantitative Way
Kevin Batz, Joost-Pieter Katoen and Nora Orhan

Tool Demo: Toward Unbounded Proof with Kani Loop Contracts
Qinheping Hu, Michael Tautschnig, Remi Delmas and Celina Val

11:30

VOCE: A Virtual On-Call Engineer for Automated Alert Incident Analysis Using a Large Language Model
Jia Chen, Xiao Lei Chen, Jie Shi, Peng Wang and Wei Wang

12:00	Hybridize Functions: A Tool for Automatically Refactoring Imperative Deep Learning Programs to Graph Execution Raffi Khatchadourian, Tatiana Castro Vélez, Mehdi Bagherzadeh, Nan Jia and	Stream-Based Monitoring of Algorithmic Fairness Jan Baumeister, Bernd Finkbeiner, Frederik Scheerer, Julian Siber and Tobias Wagenpfeil	On the cut-elimination of the modal mu-calculus: Linear Logic to the rescue (Logic) Esaïe Bauer and Alexis Saurin	Bounded Model Checking for Rust Siddharth Priya, Joseph Tafese and Arie Gurfinkel
12:30	Lunch Room: CIBC Hall & Foyer			
	TACAS: ATP & Rewriting Chair: Xujie Si Room: MDCL 1102	RUST WORKSHOP Room: MDCL 1009	FOSSACS: Bisimulations Chair: César Sánchez Room: MDCL 1309	Diversity & Inclusion Chair: Mark Lawford Room: MDCL 1016
14:00	Augmenting Model-Based Instantiation with Fast Enumeration Lydia Kondylidou, Andrew Reynolds and Jasmin Blanchette		A General Completeness Theorem for Skip-free Star Algebras Tobias Kappé and Todd Schmid	Embedding EDI in Research—and in Ourselves: Lessons in Leadership and Belonging Prof. Sarah Dickson-Anderson, Associate Dean (Undergraduate), Faculty of Engineering, McMaster
14:30	Pantograph: A Machine-to-Machine Interaction Interface for Advanced Theorem Proving, High Level Reasoning, and Data Extraction in Lean 4	Writing safe specifications for unsafe implementations in Verus Travis Hance	A behavioural pseudometric for continuous-time Markov processes Linan Chen, Florence Clerc and Prakash Panangaden	Equity, Diversity and Inclusion in Research through Reflexivity Emmanuel Songsore Ph.D., Manager, Research Equity, Diversity and Inclusive Excellence, Office of the Vice-President Research, McMaster University
15:00	Automated Analysis of Logically Constrained Rewrite Systems using crest Jonas Schöpfung and Aart Middeldorp	Give your Rust a Koat - Towards Symbolic Execution of Rust code via Stable MIR Jost Berthold and Daniel Cumming	Alternative Characterizations of Hereditary History-Preserving Bisimilarity via Backward Ready Multisets Marco Bernardo, Andrea Esposito and Claudio Antares Mezzina	Innovation Needs All Perspectives: Why Diversity Matters in the Future of Mobility Sahar Kokaly, Ph.D., P.Eng., Software Engineering Manager ADAS Software Safety, CTC Academic and Scientific Partnerships Manager, General Motors
15:30	Multiparty Session Typing, Embedded Sung-Shik Jongmans	Transitioning Production Software Verification to Verus: An Experience Report Daniel Schoepe and Marianna Rapoport	Relational Connectors and Heterogeneous Simulations Pedro Nora, Jurriaan Rot, Lutz Schröder and Paul Wild	The Art of Saying Nothing: Mastering the Empty Diversity & Inclusion Statement – A Reviewer's Perspective Sébastien Mosser, PEng, PhD, Associate Chair, Dept. of Computing and Software,
			Panel Discussion and Q&A	

16:00	Coffee Break Room: MDCL		
	TACAS: Model checking Chair: Kristin Yvonne Rozier Room: MDCL 1102	Suguman Bansal (Invited Tutorial) Chair: Claudio Menghi Room: MDCL 1305	SVComp Chair: Room: MDCL 1008
			RUST WORKSHOP Room: MDCL 1009
16:30	Token Elimination in Model Checking of Petri Nets Nicolaj Østerby Jensen, Jiri Srba and Kim Guldstrand Larsen	Suguman Bansal: Specification-Guided RL	Lightning Talks various
17:00	Efficient Evidence Generation for Modal μ-Calculus Model Checking Anna Stramaglia, Jeroen J. A. Keiren, Maurice Laveaux and Tim A. C. Willemse		
17:30	Sound Statistical Model Checking for Probabilities and Expected Rewards Carlos E. Budde, Arnd Hartmanns, Tobias Meggendorfer, Maximilian Weininger and Patrick Wienhöft		
18:30	Welcome Reception Room: Alumni Memorial Hall		

09:00

José Meseguer: Capturing System Designs with Formal Executable Specifications (FASE invited speaker)

Room: MDCL 1305

Chair: Artur Boronat

10:00

Coffee Break

Room: MDCL

TACAS: LTL

Chair: Sebastian Junges

Room: MDCL 1102

ESOP: Types

Chair: Viktor Vafeiadis

Room: MDCL 1305

FASE: MDE

Chair: Artur Boronat

Room: MDCL 1309

FOSSACS: Semantics

Chair: Petr Jančár

Room: MDCL 1105

RUST WORKSHOP

Room: MDCL 1009

10:30

Formally Verifying a Transformation from MLTL Formulas to Regular Expressions

Zili Wang, Katherine Kosaian and Kristin Yvonne Rozier

Stratified Type Theory

Jonathan Chan and Stephanie Weirich

Compositional Learning for Synchronous Parallel Automata

Mahboubeh Samadi, Aryan Bastany and Hossein Hojjat

Context-Free Languages of String Diagrams

Matt Earnshaw and Mario Román

Using Rust and Verus for Development of Verified Operating Systems

Xiangdong Chen, Zhaofeng Li, Jerry Zhang and Anton Burtsev

11:00

SemML: Enhancing Automata-Theoretic LTL Synthesis with Machine Learning

Jan Kretinsky, Tobias Meggendorfer, Maximilian Prokop and Ashkan Zarkhah

Elucidating Type Conversions in SQL Engines

Wenjia Ye, Matías Toro, Claudio Gutierrez, Bruno C. D. S. Oliveira and Éric Tanter

Symbolic State Partitioning for Reinforcement Learning

Mohsen Ghaffari, Mahsa Varshosaz, Einar Broch Johnsen and Andrzej Wasowski

Complete Test Suites for Automata in Monoidal Closed Categories

Bálint Kocsis and Jurriaan Rot

VTrack: Retrofitting automatic verification to a production microcontroller OS

Vivien Rindisbacher, Evan Johnson, Nico Lehmann, Ranjit Jhala and Deian Stefan

11:30

Learning real-time one-counter automata using polynomially many queries

Prince Mathew, Vincent Penelle and A V Sreejith

Named Arguments as Intersections, Optional Arguments as Unions

Yaozhu Sun and Bruno C. D. S. Oliveira

Formal Architectural Patterns for Adaptive Robotic Software

James Baxter, Bert van Acker, Morten Kristensen, Thomas Wright, Ana Cavalcanti and Cláudio Gomes

Idempotent Resources in Separation Logic

Daniel Gratzer, Mathias Adam Møller and Lars Birkedal

Vest: A Case Study of Verifying Performant, Higher-Order Rust Programs in Verus

Yi Cai, Pratap Singh, Zhengyao Lin, Jay Bosamiya, Joshua Gancher, Milijana Surbatovich and Bryan

12:00	LydiaSyft: A Compositional Symbolic Synthesis Framework for LTLf Specifications Shufang Zhu and Marco Favorito	SMT-Boosted Security Types for Low-Level MPC Christian Skalka and Joseph P. Near	RoboScene: Notation for Formal Verification of Human-Robot Interaction Holly Hendry, Ana Cavalcanti, Cade McCall and Mark Chattington	A Diagrammatic Algebra for Program Logics Filippo Bonchi, Alessandro Di Giorgio and Elena Di Lavore	Verification of Cryptographic Implementations in Lean with Aeneas Son Ho, Aymeric Fromherz and Jonathan Protzenko
12:15	Automating the Analysis of Quantitative Automata with QuAK Marek Chalupa, Thomas A. Henzinger, Nicolas Mazzocchi and N. Ege Saraç				
12:30	Lunch Room: CIBC Hall & Foyer				
	TACAS: Verification I Chair: Florian Zuleger Room: MDCL 1102	ESOP: Static Analysis Chair: Ori Lahav Room: MDCL 1305	FASE: Fundamentals Chair: Mahsa Varshosaz Room: MDCL 1309	RUST WORKSHOP Room: MDCL 1009	Ask-me-anything Room: MDCL 1008
14:00	Extracting Linear Relations from Gröbner Bases for Formal Verification of And-Inverter Graphs Daniela Kaufmann and Jérémy Berthomieu	Formal Verification of WTO-based Dataflow Solvers Roméo La Spina, Delphine Demange and Sandrine Blazy	Stochastic Timed Graph Transformation Systems Sven Schneider, Maria Maximova and Holger Giese	Verifying the Rust Standard Library Carolyn Zech, Celina Val and Rahul Kumar	The Future of Conferences with Laura Kovacs and Marie Farrell Host: Sebastian Junges
14:30	Cyclone: A Heterogeneous Tool for Verifying Infinite Descent Liron Cohen, Reuben Rowe and Matan Shaked	Efficient Synthesis of Tight Polynomial Upper-bounds for Systems of Conditional Polynomial Recurrences Amir Goharshady, S. Hitarth and Sergei ...	Prove your Colorings: Formal Verification of Cache Coloring of Bao Hypervisor Axel Ferréol, Laurent Corbin and Nikolai Kosmatov	Initial Steps Toward Verifying the Rust Standard Library Using Verus Elanor Tang, Travis Hance and Bryan Parno	

15:00	Implicit Rankings for Verifying Liveness Properties in First-Order Logic Raz Lotan and Sharon Shoham	Context-Sensitive Demand-Driven Control-Flow Analysis Tim Whiting and Kimball Germane	Reasoning about Substitutability at the Level of Bytecode Marco Paganoni and Carlo A. Furia	Open Discussion	Software Liability, Legislation, AI Act, What Does It Mean For Us with Holger Hermanns and Tiziana Margaria Host: Elizabeth Polgreen
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15:30	Neural Network Verification with Branch-and-Bound for General Nonlinearities Zhouxing Shi, Qirui Jin, Zico Kolter, Suman Jana, Cho-Jui Hsieh and Huan Zhang	Abstraction of memory block manipulations by symbolic loop folding Jérôme Boillot and Jérôme Feret
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16:00	Coffee Break Room: MDCL				
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	TACAS: SAT/SMT Chair: Clark Barrett Room: MDCL 1102	Arun Ross (Invited Tutorial) Chair: Marieke Huisman Room: MDCL 1305	RUST WORKSHOP Room: MDCL 1009		
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16:30	D-Painless: A Framework for Distributed Portfolio SAT Solving Mazigh Saoudi, Souheib Baarir, Julien Sopena and Thibault Lejemble	Arun Ross			
17:00	Z3-Noodler 1.3: Shepherding Decision Procedures for Strings with Model Generation David Chocholatý, Vojtěch Havlena, Lukáš Holík, Jan Hranička, Ondrej Lengal and Juraj Síč				
17:30	Incremental SAT-Based Enumeration of Solutions to the Yang-Baxter Equation Daimy Van Caudenberg, Bart Bogaerts and Leandro Vendramin				

09:00

Amal Ahmed (ESOP invited speaker)
Room: MDCL 1305
Chair: Viktor Vafeiadis

10:00

Coffee Break
Room: MDCL

TACAS: Proofs and certificates
Chair: Daniela Kaufmann
Room: MDCL 1102

ESOP: Semantics
Chair: Marieke Huisman
Room: MDCL 1305

FOSSACS: Time and Concurrency
Chair: Eduardo Bonelli
Room: MDCL 1105

SPIN
Room: MDCL 1009

INDUSTRY DAY
Room: MDCL 1110

10:30

Unsatisfiability Proofs for Horn Solving
Rodrigo Otoni, Martin Blicha, Matias Barandiaran Rivera, Patrick Eugster, Jan Kofroň and Natasha Sharygina

Coverage Semantics for Dependent Pattern Matching
Joseph Eremondi and Ohad Kammar

Model-checking real-time systems: revisiting the alternating automaton route
Patricia Bouyer, B Srivathsan and Vaishnavi Vishwanath

Developments in Symbolic Model Checking
Orna Grumberg

Weathering the Weather: The Storms Gathering Around the Development of Safety-Critical Systems
Chris Hobbs (Consultant)

11:00

Fixed Point Certificates for Reachability and Expected Rewards in MDPs
Krishnendu Chatterjee, Tim Quatmann, Maximilian Schäffeler, Maximilian Weininger, Tobias Winkler and Daniel Zilken

An abstract, certified account of operational game semantics
Peio Borthelle, Guilhem Jaber, Tom Hirschowitz and Yannick Zakowski

Temporal Hyperproperties for Population Protocols
Nicolas Waldburger, Chana Weil-Kennedy, Pierre Ganty and César Sánchez

11:15

Safe Agile: A Safety Strategy for Agile Development Strategy for Spacecrafts or Space robots
Thomas Chowdhury (MDA Space)

11:30

Certifying Pareto-Optimality in Multi-Objective Maximum Satisfiability
Christoph Jabs, Jeremias Berg, Bart Bogaerts and Matti Järvisalo.

Context-Dependent Effects in Guarded Interaction Trees
Sergei Stepanenko, Emma Nardino, Dan Frumin, Amin Timany and Lars Birkedal

Structural Liveness of Conservative Petri Nets (Complexity, petri nets, structural liveness)
Petr Jancar, Jérôme Leroux and Jiri Valusek

Accelerating CAR-based Model-Checking with Multiple Unsatisfiable Cores
Yibo Dong, Xiwei Wu, Jianwen Li, Geguang Pu and Ofer Strichman

12:00	Revisiting DRUP-based Interpolants with CaDiCaL 2.0 Yakir Vizel and Basel Khouri	On the Relationship between Dijkstra Monads and Higher-Order Fixpoint Logic Risa Yamada, Naoki Kobayashi, Ken Sakayori and Ryosuke Sato	Two-sorted algebraic decompositions of Brookes's shared-state denotational semantics (Models, axiomatization, effects) Yotam Dvir, Ohad	Efficient Model Checking for the Alternating-Time μ-Calculus via Effectivity Frames Daniel Hausmann, Merlin Humml, Simon Prucker and Lutz Schröder	Temporal specification languages in industrial hardware verification Simon Jantsch (Siemens EDA)
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12:30

Lunch
Room: CIBC Hall & Foyer

13:00

ETAPS General Assembly
Room: MDCL 1305

TACAS: Synthesis Chair: Elizabeth Polgreen Room: MDCL 1102	ESOP: Concurrency 1 Chair: Viktor Vafeiadis Room: MDCL 1305	SPIN Room: MDCL 1009	INDUSTRY DAY Room: MDCL 1110	Tool Demo Session Chair: Room: MDCL 1008
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14:00	Accelerating Protocol Synthesis and Detecting Unrealizability with Interpretation Reduction Derek Egoal and Stavros Tripakis	Iso-Recursive Multiparty Sessions and their Automated Verification Marco Giunti and Nobuko Yoshida	MoXI session	The Challenge of Information Management within the Software Defined Vehicles Tara Vatcher (Stellantis)
14:30	Synthesis of Universal Safety Controllers Bernd Finkbeiner, Niklas Metzger, Satya Prakash Nayak and Anne-Kathrin Schmuck	Multiparty Session Types with a Bang! Matthew Alan Le Brun, Simon Fowler and Ornela Dardha		

14:45				Using lightweight formal methods to check correctness of production code for Amazon S3 Rajeev Joshi (Amazon Web Services)
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15:00	Synthesis with Guided Environments Orna Kupferman and Ofer Leshkowitz	First-Person Choreographic Programming with Continuation-Passing Communications Sung-Shik Jongmans	
15:30	Value Iteration with Guessing for Markov Chains and Markov Decision Processes Krishnendu Chatterjee, Mahdi Jafariraviz, Raimundo Saona Urmeneta and Jakub Svoboda	An Automata-theoretic Basis for Specification and Type Checking of Multiparty Protocols Felix Stutz and Emanuele D'Ossualdo	Abstract Interpretation of Floating-Point Digital Filters in Nuclear Plant Software. Pierre-Yves Piriou (EDF), Maxime Jacquemin (CEA) and Franck Védrine (CEA)

16:00	Coffee Break Room: MDCL		
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	TACAS: Equivalence checking Chair: Anton Wijs Room: MDCL 1102	ESOP: Fresh Perspectives Chair: Peter Müller Room: MDCL 1305	FOSSACS: Programs Chair: Naoki Kobayashi Room: MDCL 1105	SPIN Room: MDCL 1009	INDUSTRY DAY Room: MDCL 1110
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16:30	Refuting Equivalence in Probabilistic Programs with Conditioning Krishnendu Chatterjee, Ehsan Kafshdar Goharshady, Petr Novotný and Đorđe Žikelić	Neural Network Verification is a Programming Language Challenge Lucas C. Cordeiro, Matthew L. Daggitt, Julien Girard-Satabin, Omri Isac, Taylor T. Johnson, Guy Katz, Ekaterina Komendantskaya, Augustin Lemesle,	Sharing and Linear Logic with Restricted Access Pablo Barenbaum and Eduardo Bonelli	0-1 Laws for LTL and CTL over Random Transition Systems Yanni Dong, Milan Lopuhaä-Zwakenberg and Marielle Stoelinga	Advancing software solutions for CAR-T therapy manufacturing and standardization. Ethan Dhanraj (OmniaBio) and Hanene Ben Yedder (OmniaBio)
17:00	Revisiting Differential Verification: Equivalence Verification with Confidence Samuel Teuber, Philipp Kern, Marvin Janzen and Bernhard Beckert	Formal Autograding in a Classroom Dragana Milovančević, Mario Bucev, Marcin Wojnarowski, Samuel Chassot and Viktor Kunčák	Combining quantum and classical control: syntax, semantics and adequacy Kinnari Dave, Louis Lemonnier, Romain Péchoux and Vladimir Zamdzhiev	A Modular Program-Transformation Framework for Reducing Specifications to Reachability Dirk Beyer, Marek Jankola, Marian Lingsch-Rosenfeld, Tian Xia and Xiyue Zheng	Agile Development: Ensuring Safety in Rapid Iteration Cycles Mehrnoosh Askarpour (General Motors Canada), Sahar Kokaly (General Motors Canada) and Ramesh S (General Motors R&D)

17:30	Equivalence Checking of a libm Port Mark S. Baranowski, Zvonimir Rakamaric and Ganesh Gopalakrishnan.	The Vanilla Sequent Calculus is Call- by-Value Beniamino Accattoli	BiGKAT: an algebraic framework for relational verification of probabilistic programs Leandro Gomes, Patrick Baillot and Marco Gaboardi	(Asynchronous) Temporal Logics for Hyperproperties on Finite Traces Alberto Bombardelli, Laura Bozzelli, Cesar Sanchez and Stefano Tonetta	Networking and informal discussions
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18:30	Banquet Room: LIUNA Station
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09:00 Matt Dwyer: Leveraging Abstractions for Validation of Machine Learning Models (unifying speaker)
Room: MDCL 1305

10:00 Coffee Break
Room: MDCL

TACAS: Games

Chair: Jie-Hong Roland Jiang
Room: MDCL 1102

ESOP: Probabilistic Programming

Chair: Viktor Vafeiadis
Room: MDCL 1305

SPIN

Room: MDCL 1009

10:30 Reachability for Nonsmooth Systems with Lexicographic Jacobians
Chenxi Ji, Huan Zhang and Sayan Mitra

Verifying Algorithmic Versions of the Lovász Local Lemma
Rongen Lin, Hongjin Liang and Xinyu Feng

Growing an ω -automata library
Alexandre Duret-Lutz

11:00 Non-Zero-Sum Games with Multiple Weighted Objectives
Yoav Feisntein, Orna Kupferman and Noam Shenwald

A Program Logic for Concurrent Randomized Programs in the Oblivious Adversary Model
Weijie Fan, Hongjin Liang, Xinyu Feng and Hanru Jiang

Resilience through Automated Adaptive Configuration for Distribution and Replication
Scott Stoller, Balaji Jayasankar and Yanhong A. Liu

11:30 Fast value iteration: A uniform approach to efficient algorithms for energy games
Michaël Cadilhac, Antonio Casares and Pierre Ohlmann

Variable Elimination as Rewriting in a Linear Lambda Calculus
Claudia Faggian, Thomas Ehrhard and Michele Pagani

An Efficient and Versatile Approach to Shortest Path Problems in Interprocedural Programs
Theo De Castro Pinto, Antoine Rollet and Grégoire Sutre

12:00 Proxy Attribute Discovery in Machine Learning Datasets via Inductive Logic Programming
Rafael Gonçalves, Filipe Gouveia, Inês Lynce and José Fragoso Santos

A Complete Axiomatisation of Equivalence for Discrete Probabilistic Programming
Robin Piedeleu, Mateo Torres-Ruiz, Alexandra Silva and Fabio Zanasi

12:30 Lunch
Room: CIBC Hall & Foyer

TACAS: Verification II
Chair: Marijn Heule
Room: MDCL 1102

ESOP: Verification
Chair: Viktor Vafeiadis
Room: MDCL 1305

SPIN
Room: MDCL 1009

Award Winner Presentations
Chair: Marieke Huisman
Room: MDCL 1105

TestComp
Chair:
Room: MDCL 1008

14:00 Dynamic Verification of OCaml Software with Gospel and Ortac/QCheck-STM
Nikolaus Huber, Naomi Spargo, Nicolas Osborne, Samuel Hym and Jan Midtgaard

Compositional Shape Analysis with Shared Abduction and Biabductive Loop Acceleration
Florian Sextl, Adam Rogalewicz, Tomáš Vojnar and Florian Zuleger.

On-the-fly Cone-of-Influence Reduction for Model Checking Concurrent Software
Csanád Telbisz, Levente Bajczi, Dániel Szekeres and András Vörös

Doctoral Dissertation Award

14:30	Pushing the Limit: Verified Performance-Optimal Causally-Consistent Database Transactions Shabnam Ghasemirad, Christoph Sprenger, Si Liu, Luca Multazzu and David Basin	CUTECat: Concolic Execution for Computational Law Pierre Goutagny, Aymeric Fromherz and Raphaël Monat	Locating Concurrency Errors in Windows .NET Applications by Fuzzing over Thread Schedules Filip Kliber and Pavel Parizek	Test Of Time Award
15:00	Weakly acyclic diagrams: A data structure for infinite-state symbolic verification Michael Blondin, Michaël Cadilhac, Xin-Yi Cui, Philipp Czerner, Javier Esparza and Jakob Schulz	Coma, an Intermediate Verification Language with Explicit Abstraction Barriers Andrei Paskevich, Paul Patault and Jean-Christophe Filliâtre	Presentation of the results of CHC-COMP Gidon Ernst and Jose F. Morales	Test-Of-Time Tool Award
15:30	Certifiably Robust Policies for Uncertain Parametric Environments Yannik Schnitzer, Alessandro Abate and David Parker	Cognacy Queries over Dependence Graphs for Transparent Visualisations Joseph Bond, Cristina David, Minh Nguyen, Dominic Orchard and Roly Perera		Artifact Evaluation Report & Awards
16:00	Coffee Break Room: MDCL			
	TACAS: Quantum & GPU Chair: Arie Gurfinkel Room: MDCL 1102	ESOP: Concurrency 2 Chair: Nobuko Yoshida Room: MDCL 1305	TestComp Chair: Room: MDCL 1008	
16:30	GPUexplore-prob: Markov Chain State Space Construction and Verification with GPUs Jan Heemstra and Anton Wijs	Sufficient Conditions for Robustness of RDMA Programs Guillaume Ambal, Ori Lahav and Azalea Raad		
16:45	SLIQSim: A Quantum Circuit Simulator and Property Checker Tian-Fu Chen and Jie-Hong Roland Jiang			
17:00	AutoQ 2.0: From Verification of Quantum Circuits to Verification of Quantum Programs Yu-Fang Chen, Kai-Min Chung, Min-Hsiu Hsieh, Wei-Jia Huang, Ondrej Lengal, Jyun-Ao Lin and Wei-Lun Tsai	Formulas as Processes, Deadlock-freedom as Choreographies Matteo Acclavio, Giulia Manara and Fabrizio Montesi		

17:30

**Parallel Equivalence Checking of
Stabilizer Quantum Circuits on
GPUs**

Muhammad Osama, Dimitrios Thanos and
Alfons Laarman

**Constructive characterisations of
the must-preorder for asynchrony**

Giovanni Bernardi, Ilaria Castellani, Paul
Laforgue and Léo Stefanescu
