Programme of ETAPS 2026
Turin, Italy
April 11–16, 2026

08:45 ETAPS 2026 Opening
Room: Sala 500

09:00 Christel Baier: Verification of Infinite-horizon Properties of Dynamic Bayesian Networks
Room: Sala 500
Chair: Nathalie Bertrand

10:00 Coffee Break
Room: Expo Area

TACAS: Proofs and Quantifier Elimination	FASE: SE and AI	FOSSACS: Logic, Model Checking, Formal Specifications	FM4All	RUST
Room: Sala 500	Chair: Elvira Albert and Corina Pasareanu Room: Sala Madrid	Chair: Joost-Pieter Katoen Room: Sala Londra	Chair: Luigia Petre Room: Sala Berlino	Chair: Room: Sala Parigi

10:30

Real-time Proof Checking for Distributed Incremental SAT Solving
Dominik Schreiber, Mathias Fleury, Katalin Fazekas and Armin Biere.

Revisiting the Role of Natural Language Code Comments in Code Translation
Monika Gupta, Ajay Meena, Anamitra Roy Choudhury, Vijay Arya and Srikanta Bedathur.

The Modal Logic of Abstraction Refinement
Jakob Piribauer and Vinzent Zschuppe.

10:50

Enumerating Choice Terms in Model-Based Quantifier Instantiation
Lydia Kondylidou, Andrew Reynolds, Jasmin Blanchette and Cesare Tinelli.

From Words to Code: Do NLP Prompting Strategies Generalize to Code Generation?
Erin Woo, Sangyeop Yeo, Hyungkook Jun, Sangcheol Kim, Seung-won Hwang and Yu-Seung Ma.

Complete FSM Testing Using Strong Separability
Robert Hierons and Mohammad Reza Mousavi.

11:10

Hint-Based SMT Proof Reconstruction
Joshua Clune, Haniel Barbosa and Jeremy Avigad.

LusGen: Leveraging LLMs for Safety-Critical Lustre Design and Requirements Traceability
Yili Jiang, Zhuoran Yan, Ning Ge, Yuan Wang, Jiahao Weng and Chunming Hu.

Synthesising Asynchronous Automata from Fair Specifications
Béatrice Bérard, Benjamin Monmege, B Srivathsan and Arnab Sur.

11:30

Incremental Forward Reasoning for White-Box Proof Search
Xavier Généreux and Jannis Limperg.

Quantifying Privacy Risks in Synthetic Data: A Study on Black-Box Membership Inference
Giacomo Fantino, Marco Rondina, Antonio Vetro' and Juan Carlos De Martin.

From Trees to Tree-Like: Distribution and Synthesis for Asynchronous Automata
Mathieu Lehaut, Anca Muscholl and Nir Piterman

Time					
11:50	**QSOLE: Automatic QBF Equivalence Checking** Peter Pfeiffer, Mark Peyrer, Daniel Grosse and Martina Seidl.	**Formally correct search for interpretable DNFs** Imane Bousdira, Martin Cooper and Aurélie Hurault.	**Inquisitive team semantics of LTL** Laura Bozzelli, Tadeusz Litak, Munyque Mittelmann and Aniello Murano.		
12:00	**Fast Ramsey Quantifier Elimination in LIRA (with applications to liveness checking)** Kilian Lichtner, Pascal Bergsträßer, Moses Ganardi, Anthony W. Lin and Georg Zetzsche.				
12:10	**Quantifier Elimination Meets Treewidth** Hao Wu, Jiyu Zhu, Amir Goharshady, Jie An, Bican Xia and Naijun Zhan.	**DivKC: A Divide-and-Conquer Approach to Knowledge Compilation** Olivier Zeyen, Karim Tit, Maxime Cordy and Gilles Perrouin.	**Complexity of Model Checking Second-Order Hyperproperties on Finite Structures** Bernd Finkbeiner, Hadar Frenkel and Tim Rohde.		
12:30	**Lunch Break** Room: Expo Area				
14:00	**Leonardo de Moura: The Lean Programming Language and Theorem Prover (Invited Tutorial)** Room: Sala 500 Chair: Guy Katz				
15:30	**Tool Demos and Posters (with Coffee)** Room: Expo Area				
16:00	**Coffee Break with Tool Demos and Posters** Room: Expo Area				
	TACAS: Software Verification Room: Sala 500	**FASE: Advanced SW Development** Chair: Artur Boronat Room: Sala Madrid	**FOSSACS: Automata, Games, Concurrency Models** Chair: B. Srivathsan Room: Sala Londra	**SV-Comp** Chair: Room: Sala Berlino	**RUST** Chair: Room: Sala Parigi
16:30	**Efficient Verification of Lingua Franca Programs** Kyungmin Bae, Mircea Marin, Peter Csaba Ölveczky, Mario Reja and Mikheil Rukhaia.	**QEMI: A Quantum Software Stacks Testing Framework via Equivalence Module Inputs** Junjie Luo, Shangzhou Xia, Fuyuan Zhang and Jianjun Zhao.	**Well-quasi-orderings on word languages** Aliaume Lopez, Nathan Lhote and Lia Schuetze		

16:50	**Verifying Floating-Point Programs in Stainless** Andrea Gilot, Axel Bergström and Eva Darulova.	**Towards Decentralised Dynamic Reconfiguration of Software Systems** Mina Yavari and Damian Arellanes.	**The Complexity of Games with Randomised Control** Sarvin Bahmani, Rasmus Ibsen-Jensen, Soumyajit Paul, Sven Schewe, Friedrich Slivovsky, Qiyi Tang, Dominik Wojtczak and Shufang Zhu.
17:10	**A Case Study in Firmware Verification: Applying Formal Methods to Intel TDX Module** Dirk Beyer, Po-Chun Chien, Bo-Yuan Huang, Nian-Ze Lee and Thomas Lemberger.	**Analyses as First-Class Citizens in Model-Driven Development** Tianhai Liu, Shmuel Tyszberowicz and Bernhard Beckert.	**The Value Problem for Weighted Timed Games with Two Clocks is Undecidable** Isa Vialard, Joël Ouaknine and Quentin Guilmant.
17:30	**VeriStruct: AI-assisted Automated Verification of Data-Structure Modules in Verus** Chuyue Sun, Yican Sun, Daneshvar Amrollahi, Ethan Zhang, Shuvendu Lahiri, Shan Lu, David Dill and Clark Barrett.	**Don't go MAD with Anomalies! Design-time Microservice Anomaly Detection in Migration to Microservices** Valentim Romão, Rafael Soares, Luis Rodrigues and Vasco Manquinho.	**Active Learning Techniques for Pomset Recognizers** Adrien Pommellet, Amazigh Amrane, Edgar Delaporte, Geoffroy Du Prey and Oscar Peyron.
17:50	**Deciding Serializability in Network Systems** Guy Amir, Mark Barbone, Nicolas Amat and Jules Jacobs.	**EasyRPL - A web-based tool for modelling and analysis of cross-organisational workflows** Muhammad Rizwan Ali, Violet Ka I Pun and Guillermo Román-Díez.	**On Reversibility in Petri Nets** Hernán Melgratti, Claudio Antares Mezzina and G. Michele Pinna.
18:10	**Extending FRET with SLEEC Rules: Formalization, Obligation Inference, and Monitoring** Mahrokh Mirani, Paola Inverardi, Patrizio Pelliccione, Franco Raimondi and Nicolas Troquard.	**ForumSeeker: Fusion Retrieval of Online Technical Forums for Effective Troubleshooting** Youyang Kim, Yaoping Ruan, Young-Kyoon Suh, Liqiang Wang and Byungchul Tak.	**Bridging the Gap Between Plain VASS and Branching VASS** Clotilde Bizière, Jérôme Leroux and Grégoire Sutre.
19:00	**ETAPS Reception** **Room: Corridoio Nizza**		

09:00   **Einar Broch Johnsen: Formal Methods meet Digital Twins: Challenges and Opportunities**
Room: Sala 500
Chair: Robbert Krebbers

10:00   **Coffee Break**
Room: Expo Area

TACAS: Probabilistic Model Checking & Software Testing	ESOP: Concurrency	FASE: Autonomous Systems/ Applications	FOSSACS: Kleene Algebra, Expressions, String Diagrams, Categorical Logic	RUST
Room: Sala 500	Room: Sala Berlino	Chair: Luigia Petre Room: Sala Madrid	Chair: Igor Walukiewicz Room: Sala Londra	Chair: Room: Sala Parigi
10:30 **Multiple Long-Run and omega-Regular Objectives in MDPs** Julius Ide, Joost-Pieter Katoen, Hannah Mertens and Tim Quatmann.	**Denotational reasoning for asynchronous multiparty session types** Dylan McDermott and Nobuko Yoshida.	**Failure Modes and Effects Analysis: An Experience from the E-Bike Domain** Andrea Bombarda, Federico Conti, Marcello Minervini, Aurora Francesca Zanenga and Claudio Menghi.	**Partial Reductions for Kleene Algebra with Single-Word Hypotheses** Liam Chung and Tobias Kappé.	
10:50 **Robust Verification of Concurrent Stochastic Games** Angel He and David Parker.	**Practical Refinement Session Type Inference** Toby Ueno and Ankush Das.	**Causal Liability in Autonomous Systems** Kaveh Aryan, Hana Chockler and Mohammad Reza Mousavi.	**A Complete Propositional Dynamic Logic for Regular Expressions with Lookahead** Yoshiki Nakamura.	
11:10 **Computing Fixpoints of Learned Functions: Chaotic Iteration and Simple Stochastic Games** Paolo Baldan, Sebastian Gurke, Barbara König and Florian Wittbold.	**Recursive Logical Relations for Intuitionistic Linear Logic Session Types** Stephanie Balzer, Farzaneh Derakhshan, Robert Harper and Yue Yao.	**Search-based Software Testing for Drone Applications: An Experience with the Simulink Environment** Annalisa Sergi, Yousef Ahmed Abdel Rahman Shoeib, Andrea Bombarda, Nunzio Marco Bisceglia and Claudio Menghi.	**Tapes as Stochastic Matrices of String Diagrams** Filippo Bonchi and Cipriano Junior Cioffo.	
11:30 **DeGAS: Gradient-Based Optimization of Probabilistic Programs without Sampling** Francesca Randone, Romina Doz, Mirco Tribastone and Luca Bortolussi.	**A Formal Interface for Concurrent Search Structure Templates** Duc Than Nguyen and William Mansky.	**Modeling and Analyzing Planning-Aware Distributed Cyber-Physical Systems with Timed Graph Transformation Systems** Mustafa Ghani and Holger Giese.	**Diagrammatic Reasoning with Control as a Constructor, Applications to Quantum Circuits** Noé Delorme and Simon Perdrix.	

11:50	**jMT: Testing Correctness of Java Memory Models**	**Reduction for Structured Concurrent Programs**	**Composing Clinical Activity Guidance for Multimorbidity via Bounded Relational Analysis**	**Quantum Coherence Spaces Revisited: A von Neumann (Co)Algebraic Approach**
	Lukas Panneke and Heike Wehrheim.	Namratha Gangamreddypalli, Constantin Enea and Shaz Qadeer.	Artur Boronat.	Thea Li and Vladimir Zamdzhiev.
12:10	**Demonstrating ARG-V's Generation of Realistic Java Benchmarks for SV-COMP**	**Rely-Guarantee Is Coinductive: A Proof-Centered Investigation of Inductively Approximated Coinduction**		**Realization of relational presheaves**
	Charles Moloney, Robert Dyer and Elena Sherman.	John Derrick, Chelsea Edmonds, Andrei Popescu and Jamie Wright.		Yorgo Chamoun and Samuel Mimram.

12:30 **Lunch Break**
Room: Expo Area

14:00 **Ask-Me-Anything Session**
Room: Sala 500
Chair: Sebastian Junges

15:00 **ETAPS Awards**
Room: Sala 500

16:00 **Coffee Break**
Room: Expo Area

| | **TACAS: SAT/SMT I** | **ESOP: Semantics & Compilation** | **FASE: Testing and Verification** | **FOSSACS: Category Theory, Coalgebra, Metric Systems** | **RUST** |
| | Room: Expo Area | Room: Sala Berlino | Chair: Dirk Beyer Room: Sala Madrid | Chair: Stefan Milius Room: Sala Londra | Chair: Room: Sala Parigi |

| 16:30 | **Syntactically Convex Model-Based Projection for Linear Rational Arithmetic** | **Causal-Broadcast Memory** | **Abstract Symbolic Finite Automata for Algorithmic Game Semantics** | **Quantitative Algebras Presented via Monads** |
| | Anna Becchi, Grigory Fedyukovich, Arie Gurfinkel and Lev Nachmanson. | Amir Karniel and Ori Lahav. | Aleksandar S. Dimovski. | Jiri Adamek. |

16:50	**Bit-Precise Interpolation in Bitwuzla** Aina Niemetz and Mathias Preiner.	**Specifying and Verifying RDMA Synchronisation** Guillaume Ambal, Max Stupple, Brijesh Dongol and Azalea Raad.	**Timed Contract Automata** Bernhard Beckert, Andreas Bremer and Alexander Weigl.	**Generalized Kantorovich-Rubinstein Duality beyond Hausdorff and Kantorovich** Paul Wild, Lutz Schröder, Karla Messing, Barbara König and Jonas Forster.
17:10	**Orbitopal Fixing in SAT** Markus Anders, Cayden Codel and Marijn Heule.	**A Formally Verified Procedure for Width Inference in FIRRTL** Keyin Wang, Xiaomu Shi, Jiaxiang Liu, Zhilin Wu, Taolve Chen, Fu Song and David N. Jansen.	**Unified Timing-Aware Program Verification** Dóra Cziborová, Mihály Dobos-Kovács, Kristóf Marussy and András Vörös.	**Learning bottom-up tree automata valued in monoidal categories** Quentin Aristote and Daniela Petrisan.
17:30	**Smt.ml: A Multi-Backend Frontend for SMT Solvers in OCaml** João Madeira Pereira, Filipe Marques, Pedro Adão, Hichem Rami Ait-El-Hara, Léo Andrès, Arthur Carcano, Pierre Chambart, Petar Maksimović, Nuno Santos and José Fragoso Santos.	**Relational Hoare Logic for High-Level Synthesis of Hardware Accelerators** Izumi Tanaka, Ken Sakayori, Shinya Takamaeda-Yamazaki and Naoki Kobayashi.	**Testing in Formal Verification via Witness Generation (Empirical Evaluation)** Dirk Beyer, Thomas Lemberger and Henrik Wachowitz.	**A Coalgebraic Approach to Infinite Games** Benjamin Plummer and Corina Cirstea.
17:50	**Automatically Tightening Access Control Policies with Restricter** Ka Lok Wu, Christa Jenkins, Scott Stoller and Omar Chowdhury.	**Linear Effects, Exceptions, and Resource Safety: A Curry-Howard Correspondence for Destructors** Sidney Congard, Guillaume Munch-Maccagnoni and Rémi Douence.		**A No-go Theorem for Coalgebraic Product Construction** Mayuko Kori and Kazuki Watanabe.
18:10	**Robustness Verification of Graph Neural Networks Via Lightweight Satisfiability Testing** Chia-Hsuan Lu, Tony Tan and Michael Benedikt.	**The Memorist Tale: Every Thunk Every Cost All At Once** Xing Li, Yao Li, Peter Schachte and Christine Rizkallah.		**A 2-categorical approach to the semantics of dependent type theory with computation axioms** Matteo Spadetto.

09:00 **Monika Henzinger: Guarding Privacy Over Time: Challenges and Solutions in Continuous Data Observation**
Room: Sala 500
Chair: Laura Kovács

10:00 **Coffee Break**
Room: Expo Area

TACAS: Automata	ESOP: Verification	FOSSACS: Lambda-Calculus, Program Semantics, Infinite Structures	SPIN	Industry Day
Room: Expo Area	Room: Sala Berlino	Chair: Barbara König Room: Sala Londra	Chair: Room: Sala Parigi	Chair: Giorgio Audrito Room: Sala Madrid

10:30	**A Myhill-Nerode Characterization and Active Learning for One-Clock Timed Automata** Kyveli Doveri, Pierre Ganty and B Srivathsan.	**Validating Quantum State Preparation Programs** Liyi Li, Anshu Sharma, Zoukarneini Difaizi Tagba, Sean Frett and Alex Potanin.	**Interaction Improvement** Adrienne Lancelot, Giulio Manzonetto, Guy McCusker and Gabriele Vanoni.		**SPARK - Latest Industrial Challenges and Feature Development** Invited talk: Claire Dross (AdaCore)
10:50	**Modular Attractor Acceleration in Infinite-State Games** Philippe Heim and Rayna Dimitrova.	**Outrunning Big KATs: Efficient Decision Procedures for Variants of GKAT** Cheng Zhang, Qiancheng Fu, Hang Ji, Ines Del Valle, Alexandra Silva and Marco Gaboardi.	**Lambda Galore** Mariangiola Dezani-Ciancaglini, Besik Dundua and Furio Honsell.		
11:10	**Concurrent Permissive Strategy Templates** Ashwani Anand, Christel Baier, Calvin Chau, Sascha Klüppelholz, Ali Mirzaei, Satya Prakash Nayak and Anne-Kathrin Schmuck.	**Generating Functions Meet Occupation Measures: Invariant Synthesis for Probabilistic Loops** Darion Haase, Kevin Batz, Adrian Gallus, Benjamin Lucien Kaminski, Joost-Pieter Katoen, Lutz Klinkenberg and Tobias	**K Definitions as Matching Logic Theories, Formally** Xiaohong Chen, Horatiu Cheval, Dorel Lucanu and Grigore Rosu		**Formal Methods at OCamlPro: SMT Solving with Alt-Ergo and Symbolic Execution with Owi** Hichem Rami Ait-El-Hara (OCamlPro)
11:30	**LTLf Learning Meets Boolean Set Cover** Gabriel Bathie, Nathanaël Fijalkow, Théo Matricon, Baptiste Mouillon and Pierre Vandenhove.	**Error Localization, Certificates, and Hints for Probabilistic Program Verification via Slicing** Philipp Schröer, Darion Haase and Joost-Pieter Katoen.	**Abstract Lipschitz Continuity: Combining Semantic and Quantitative Approximations** Marco Campion, Isabella Mastroeni, Michele Pasqua and Caterina Urban.		**Towards Sustainable Industrial Use of Formal Verification for Security Certification** Adel Djoudi (Thales) and Nikolai Kosmatov (Thales)

| 11:50 | Faster Signature Refinement for Branching Bisimilarity Minimization

Jan J.M. Martens and Maurice Laveaux. | A Program Logic for Under-approximating Worst-case Resource Usage

Ziyue Jin and Di Wang. | Composition Theorems for f-Differential Privacy

Annabelle McIver, Natasha Fernandes and Parastoo Sadeghi. | | Semi-Formal Accuracy Analysis of an Industrial Path Computation Algorithm

Franck Vedrine (CEA List), Grégoire Boussu (Thales), Nikolai Kosmatov (Thales) and Bruno Lathuilière (EDF) |

| 12:10 | MightyPPL : Model Checking MITL with Past and Pnueli Modalities

Hsi-Ming Ho, S Krishna, Khushraj Madnani, Rupak Majumdar and Paritosh Pandya. | Specification-Driven Generation of Summaries for Symbolic Execution

Rafael Gonçalves, Frederico Ramos, Pedro Adão and José Fragoso Santos. | Karp's NP-complete problems over first-order definable structures

Aidan Healy and Bartek Klin. | | Precomputation: A New Era in Multi-Stage Programming

Seyed Hossein Haeri (Entropy Software Foundation) |

12:30 Lunch Break
Room: Expo Area

13:00 ETAPS General Assembly
Room: Sala 500

Industry Day
Chair: Claire Dross
Room: Sala Madrid

Invited Tutorial
Chair: Corina Păsăreanu
Room: Sala 500

| 14:00 | **Lean: A Unified Platform for Verification, Programming, and AI**
Invited talk: Leonardo de Moura (AWS) | **Mieke Massink: Model Checking in Space with Applications to Medical Image Analysis** |

14:40 Check Adherence to Model in Modular and Distributed Cyber-Physical Production Systems
Abdelaziz Ouazzani Chahidi (Agnostic Production Systems), Hasnaa Ait Malek (Agnostic Production Systems), Maxime Morin (Agnostic Production Systems), Nicolas Navarro (Agnostic Production Systems), Darine Rammal (CEA List), Christophe Gaston (CEA List) and Arnault Lapitre (CEA List)

15:00 Semantics-Based Real-Time Verification for Web3
Grigore Rosu (Pi Squared), Dorel Lucanu (Pi Squared) and Xiaohong Chen (Pi Squared)

15:20 Industrial Orchestration of Testing Tools with SeaCoral
Nicolas Berthier (OCamlPro), Steven De Oliveira (OCamlPro), Nikolai Kosmatov (Thales) and Delphine Longuet (Thales)

15:30: Tool Demos and Posters (with Coffee Break)

15:40 On the Lookout for a "Bisimulation" Relation between Trace Sets for Early Design Evaluations
Gurvan Le Guernic (DGA)

16:00 Coffee Break with Tool Demos and Posters
Room: Expo Area

	ESOP: Types Room: Sala Berlino	TACAS: Static Analysis & Program Verification Room: Sala 500	AE Reports (30mins) Chair: Room: Sala Londra	Industry Day Chair: Nikolai Kosmatov Room: Sala Madrid	SPIN Chair: Room: Sala Parigi
16:30	**Lenses for Partially-Specified States** Kazutaka Matsuda, Minh Nguyen and Meng Wang.	**ReCheck: Automated Contextual Improvement Verifier for Functional Calculi across User-Defined Operational Semantics** Makoto Hamana and Kento		**From Software Engineering to AI Engineering: Bridging the Research-Industry Gap in the Age of Intelligent Systems** Invited talk: Andrea Basso (Swiss Federal Institute of Technology, EPFL and Stanford University)	
16:50	**In Cantor Space No One Can Hear You Stream** Martin Baillon, Assia Mahboubi and Pierre-Marie Pédrot.	**On Deciding Constant Runtime of Linear Loops** Florian Frohn, Jürgen Giesl, Peter Giesl and Nils Lommen.			
17:10	**Contextual Metaprogramming for Session Types** Pedro Ângelo, Atsushi Igarashi, Yuito Murase and Vasco T. Vasconcelos.	**Data Structure Analysis for Binaries** Sadra Bayat Tork, Nicholas Coughlin, Alicia Michael, James Tobler and Kirsten Winter		**Toward a scalable methodology for Automating Safety Analysis** Stefano Minopoli (Collins Aerospace)	
17:30	**Deciding not to Decide: Sound and Complete Effect Inference in the Presence of Higher-Rank Polymorphism** Patrycja Balik, Szymon Jędras and Piotr Polesiuk.	**Integrating String Reasoning in Symbolic Execution of C Programs** Rachel Cleaveland and Clark Barrett.		**HPC4AI and Industry: Research Projects and Real-World Applications** Doriana Medic (Univ; of Turin) and Marco Aldinucci (Univ; of Turin)	
17:50	**Bidirectional Type Checking for Existential Types with Higher-Rank Polymorphism** Hasti Toossi and Ningning Xie.	**Gillian Debugging: Swinging Through the (Compositional Symbolic Execution) Tree** Nat Karmios, Sacha-Elie Ayoun and Philippa Gardner.			

18:10	**Auditing Rust Crates Effectively** Lydia Zoghbi, David Thien, Ranjit Jhala, Deian Stefan and Caleb Stanford.	**Same Engine, Multiple Gears: Parallelizing Fixpoint Iteration at Different Granularities** Ali Rasim Kocal, Michael Schwarz, Simmo Saan and Helmut Seidl
18:20	**Code Generation via Meta-programming in Dependently Typed Proof Assistants** Mathis Bouverot-Dupuis and Yannick Forster.	
19:00	**ETAPS Banquet** **Room: Giardino Delle Meraviglie**	

09:00	**Guy Van Den Broeck: Symbolic Reasoning in the Age of Large Language Models**
	Room: Sala 500
	Chair: Sebastian Junges

| 10:00 | **Coffee Break** |
| | Room: Expo Area |

TACAS: CPS & Quantum	**ESOP: Analysis**	**SPIN**
Room: Sala 500	Room: Sala Berlino	Chair:
		Room: Sala Parigi

10:30	**Driving by Disproof: A Practical Model Checking Approach to Fleet Coordination**	**A Category-Theoretic Framework for Dependent Effect Systems**
	Lukas König, Christian Schildwächter, Michaela Klauck and Christian Heinzemann.	Satoshi Kura, Marco Gaboardi, Taro Sekiyama and Hiroshi Unno.
10:50	**VeriLHyS: a Framework for LTL Specification and Verification of Hybrid Systems**	**Dependently-Typed AARA: A Non-Affine Approach for Resource Analysis of Higher-Order Programs**
	Ludovico Battista, Stefano Tonetta and Gianni Zampedri.	Han Xu and Di Wang.
11:10	**TEMPORA: Efficient Verification of Metric Temporal Properties with Past in Pointwise Semantics**	**Max-Policy Iteration, Revisited**
	S. Akshay, Prerak Contractor, Paul Gastin, R Govind and B Srivathsan.	David Monniaux and Helmut Seidl.
11:30	**Trace Repair Using Temporal Behavior Trees**	**Complete Abstractions for Verification of Polymorphic Functions with Equality**
	Sebastian Schirmer, Philipp Schitz, Johann C. Dauer, Bernd Finkbeiner and Sriram Sankaranarayanan.	Malo Revel, Thomas Genet and Thomas Jensen.
11:50	**Equivalence Checking of Quantum Circuits via Path-Sum and Weighted Model Counting**	**Modular Automatic Complexity Analysis of Recursive Integer Programs**
	Wei-Jia Huang, Jingyi Mei, Alfons Laarman, Yu-Fang Chen, Christophe Chareton, Kai-Min Chung and Min-Hsiu Hsieh.	Nils Lommen and Jürgen Giesl.
12:10	**Error-Tolerant Quantum State Discrimination: Optimization and Quantum Circuit Synthesis**	**Efficient Ranking Function-Based Termination Analysis via Bidirectional Decompositional Search**
	Chien-Kai Ma, Bo-Hung Chen, Tian-Fu Chen, Dah-Wei Chiou and Jie-Hong Roland Jiang.	Yasmin Sarita, Avaljot Singh, Shaurya Gomber, Gagandeep Singh and Mahesh Viswanathan.

| 12:30 | **Lunch Break** |
| | Room: Expo Area |

TACAS: Model Checking & Hardware Verification	**Diversity, Equity, and Inclusion**	**Test-Comp**	**SPIN**
Room: Sala 500	Chair: Maurice ter Beek and Ferruccio Damiani	Chair:	Chair:
	Room: Sala Londra	Room: Sala Madrid	Room: Sala Parigi

Time		
14:00	**CTL* Model Checking on Infinite Families of Finite-State Labeled Transition Systems** Roberto Pettinau and Christoph Matheja.	
14:20	**Verifying First-Order Temporal Properties of Infinite States Systems via Timers and Rankings** Raz Lotan, Neta Elad, Oded Padon and Sharon Shoham.	
14:40	**Revisiting Stateful Partial-Order Reduction** Frédéric Herbreteau, Gérald Point and Igor Walukiewicz.	
15:00	**Deconstructing Subset Construction: Reducing While Determinizing** Markus Frohme and John Nicol.	
15:20	**ReVEAL: GNN-Guided Reverse Engineering for Formal Verification of Optimized Multipliers** Chen Chen, Daniela Kaufmann, Chenhui Deng, Zhan Song, Hongce Zhang and Cunxi Yu	
15:40	**EvolveGen: Algorithmic Level Hardware Model Checking Benchmark Generation through Reinforcement Learning** Guangyu Hu, Xiaofeng Zhou, Wei Zhang and Hongce Zhang.	
16:00	**AKR: A Model Checker for an Adaptative Probabilistic Knowing-How Logic** Valentin Cassano, Pablo Castro, Raul Fervari and Pedro R. D'Argenio.	
16:00	**Coffee Break** **Room: Expo Area**	

TACAS: SAT/SMT II
Room: Sala 500

SV-Comp and Test-Comp Community Building
Chair:
Room: Sala Madrid

SPIN
Chair:
Room: Sala Parigi

16:30   **Parallel SMT Solving via Iterative Tree Partitioning**

Tomáš Kolárik, Antti E.J. Hyvärinen, Seyedmasoud Asadzadeh and Natasha Sharygina.

16:50   **Massively Parallel Bit-Precise Verification with Bitwuzla and Mallob**

Dominik Schreiber, Aina Niemetz and Mathias Preiner.

17:10   **Exploring the SMT-LIB Benchmark Library**

Hans-Jörg Schurr, François Bobot, Mathias Preiner, Aina Niemetz, Pascal Fontaine, Cesare Tinelli and Clark Barrett.

17:30   **SMT(LIA) Sampling with High Diversity**

Yong Lai, Junjie Li and Chuan Luo.

17:50   **BDD-Based Formula Approximations for Quantified Bit-Vector Satisfiability**

Jakub Horák and Martin Jonáš.

18:10   **SMTScope: Automated and Efficient Analysis of SMT Traces**

Jonáš Fiala and Peter Müller.