



CADE and CASC. August 23 - 30. Hotel Praiamar

TUESDAY 27.08	
08:30 - 09:30	Invited Talk: Assia Mahboubi. <i>Computer Deduction and (Formal) Proofs in Mathematics</i>
09:30 - 10:00	Andrei Popescu and Dmitriy Traytel. <i>A Formally Verified Abstract Account of Gödel's Incompleteness Theorems</i>
10:00 - 10:30	Coffee break
10:30 - 12:30	Giles Reger and Andrei Voronkov. <i>Induction in Saturation-Based Proof Search</i> Karel Chvalovský, Jan Jakubuv, Martin Suda and Josef Urban. <i>ENIGMA-NG: Efficient Neural and Gradient-Boosted Inference Guidance for E</i> Ulrich Furbach, Teresa Krämer and Claudia Schon. <i>Names are not just Sound and Smoke: Word Embeddings for Axiom Selection.</i> Michael Rawson and Giles Reger. <i>Old or Heavy? Decaying Gracefully with Age/Weight Shapes</i>
12:30 - 14:00	Lunch
14:00 - 16:00	David Plaisted. <i>The Aspect Calculus</i> Valentin Cassano, Raul Fervari, Guillaume Hoffmann, Carlos Areces and Pablo Castro. <i>A Tableaux Calculus for Default Intuitionistic Logic</i> Yizheng Zhao and Renate A. Schmidt. <i>FAME 2.0 -- A Semantic Forgetting Tool for Description Logics with Qualified Number Restrictions</i> Tanel Tammet. <i>GKC: a Reasoning System for Large Knowledge Bases</i> Raúl Gutiérrez and Salvador Lucas. <i>Automatic Generation of Logical Models with AGES</i>
16:00 - 16:30	Coffee break
16:30 - 17:10	Stephan Schulz, Simon Cruanes and Petar Vukmirović. <i>Faster, Higher, Stronger: E 2.3</i> Geoff Sutcliffe and Francis Jeffrey Pelletier. <i>JGXYZ - An ATP System for Gap and Glut Logics</i>
17:10 - 18:40	Awards session CADE-27 Best Paper Awards Herbrand Award for Distinguished Contributions to Automated Reasoning to Nikolaj Bjorner and Leonardo de Moura Presentation by the awardee: The rise of Model-based Satisfiability Modulo Theories and Logic-based Software Engineering tools.
19:00 - 20:30	Reception
WEDNESDAY 28.08	
08:30 - 09:30	Invited Talk: Cas Cremers. <i>Automated Reasoning for Security Protocols</i>
09:30 - 10:00	Di Long Li and Alwen Tiu. <i>Combining ProVerif and Automated Theorem Provers for Security Protocol Verification</i>
10:00 - 10:30	Coffee break
10:30 - 12:30	Christian Sternagel and Sarah Winkler. <i>Certified Equational Reasoning via Ordered Completion</i> Siva Anantharaman, Peter Hibbs, Paliath Narendran and Michael Rusinowitch. <i>Unification modulo Lists with Reverse - Relation with Certain Word Equations</i> Nao Hirokawa, Julian Nagele, Vincent Van Oostrom and Michio Oyamaguchi. <i>Confluence by Critical Pair Analysis Revisited</i> Christina Kohl and Aart Middeldorp. <i>Composing Proof Terms</i>
12:30 - 13:30	Lunch
13:30 - 18:00	Excursion
THURSDAY 29.08	
08:30 - 09:30	Invited Talk: Cesare Tinelli. <i>From Counter-Model-based Quantifier Instantiation to Quantifier Elimination in SMT</i>
09:30 - 10:00	Patrick Trentin and Roberto Sebastiani. <i>Optimization Modulo the Theory of Floating-Point Numbers</i>
10:00 - 10:30	Coffee break
10:30 - 12:30	Mingshuai Chen, Jian Wang, Jie An, Bohua Zhan, Deepak Kapur and Naijun Zhan. <i>NIL: Learning Nonlinear Interpolants</i> Dennis Peuter and Viorica Sofronie-Stokkermans. <i>On Invariant Synthesis for Parametric Systems</i> Jürgen Giesl, Peter Giesl and Marcel Hark. <i>Computing Expected Runtimes for Constant Probability Programs</i> Diego Calvanese, Silvio Ghilardi, Alessandro Gianola, Marco Montali and Andrey Rivkin. <i>Model Completeness, Covers and Superposition</i>
12:30 - 14:00	Lunch
14:00 - 15:30	André Platzer. <i>Uniform Substitution in One Fell Swoop</i> Brandon Bohrer, Manuel Fernandez and André Platzer. <i>dLi: Definite Descriptions in Differential Dynamic Logic</i> Katherine Cordwell and André Platzer. <i>Towards Physical Hybrid Systems</i>
15:30 - 16:00	Coffee break
16:00 - 17:00	Aina Niemetz, Mathias Preiner, Andrew Reynolds, Yoni Zohar, Clark Barrett and Cesare Tinelli. <i>Towards Bit Width Independent Proofs in SMT Solvers</i> Martin Bromberger, Mathias Fleury, Simon Schwarz and Christoph Weidenbach. <i>SPASS-SATT a CDCL(LA) Solver</i>
17:20 - 18:20	Business meeting. 2019 Woodie Bledsoe Student Travel Awards
19:00 - 22:30	Dinner
FRIDAY 30.08	
9:30 - 10:00	Geoff Sutcliffe. <i>The CADE-27 ATP System Competition - CASC-27</i>
10:00 - 10:30	Coffee break
10:30 - 12:30	Vojtěch Havlena, Lukas Holik, Ondrej Lengal and Tomas Vojnar. <i>Automata Terms in a Lazy WSks Decision Procedure</i> Mateus De Oliveira Oliveira and Alexsander Andrade de Melo. <i>On the Width of Regular Classes of Finite Structures</i> Alberto Fiori and Christoph Weidenbach. <i>SCL -- Clause Learning from Simple Models</i>
12:30 - 14:00	Lunch
14:00 - 16:00	Chad Brown, Thibault Gauthier, Cezary Kaliszyk, Geoff Sutcliffe and Josef Urban. <i>GRUNGE: The Grand Unified ATP Challenge</i> Alexander Bentkamp, Jasmin Christian Blanchette, Sophie Tournet, Petar Vukmirović and Uwe Waldmann. <i>Superposition with Lambdas</i> Ahmed Bhayat and Giles Reger. <i>Restricted Combinatory Unification</i> Haniel Barbosa, Andrew Reynolds, Daniel El Ouraoui, Cesare Tinelli and Clark Barrett. <i>Extending SMT solvers to Higher-Order Logic</i>
16:00 - 16:30	Coffee break

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