SCHEDULE

All times include questions/discussion. Most 30’ talks that were proposed early were given longer slots in the interest of clarity and discussion. As more talks were added this was less and less feasible. The term “tutorial” is used liberally to mean a tutorial or simply a longer talk.

Monday November 20, 2023

09:00 Opening, Introduction, Organization
09:30 Tutorial: Haniel Barbosa: Intro to SMT proofs – Towards Increasing Proof Automation in Lean via SMT Proofs
10:30 Coffee/tea break
11:00 Tutorial: Andrew Reynolds: Proofs in CVC5 – New Directions with AletheLF
12:00 Discussion
12:15 Lunch
14:00 Hanna Elif Lachnitt: CVC5 Integration with Isabelle/HOL
14:45 Pascal Fontaine: On the Need for a Modular Approach for Automated Reasoners
15:30 Cake
16:00 Silvio Ghilardi: Interpolation Properties for Array Theories – Positive and Negative Results
16:45 Franz Baader: How to Combine Explanations – The Case of Description Logics with Concrete Domains
17:30 Discussion
18:00 Dinner

Tuesday November 21, 2023

09:30 Tutorial: Maria Paola Bonacina: The QSMA Algorithm
10:30 Coffee/tea break
11:00 Tutorial: Feifei Ma and Fuqi Jia: Solving Reasoning Problems with Neuro-Symbolic Methods
12:00 Discussion
12:15 Lunch
14:00 Cynthia Kop: Higher-Order Constrained Rewriting
14:45 Jasper Nalbach: A Compositional Proof System for Cylindrical Algebraic Decomposition
15:30 Cake
16:00 Sophie Tourret: Formalizing the Splitting Framework
16:45 Uwe Waldmann: On the (In-)Completeness of Destructive Equality Resolution in the Superposition Calculus
17:30 Discussion
18:00 Dinner
**Wednesday November 22, 2023**

09:30 Fuqi Jia: Improving SMT Solving via Incorporating More Techniques  
10:00 Clare Dixon: Compositionality – From Temporal Logics to Verification of Autonomous Robot Systems  
10:45 Coffee/Tea break  
11:15 Claudia Schon: Using Word Similarities to Guide Resolution  
11:45 Konstantin Korovin: From Instantiation to Superposition with a Touch of Machine Learning  
12:15 Lunch  
14:00 Outing (excursion to Bernkastel-Kues followed by banquet at Landgasthof Paulus)

**Thursday November 23, 2023**

09:00 **Tutorial:** Christoph Weidenbach: The SCL Calculus and its Implementation  
10:10 Viorica Sofronie-Stokkermans: Hierarchical Reasoning and Symbol Elimination and Applications to the Verification of Parametric Systems  
10:45 Coffee/Tea break  
11:15 Amy Felty: Reasoning with Structured Contexts of Assumptions  
11:50 Break  
12:15 Lunch  
13:30 Martina Seidl: On QBF Proof Systems  
14:10 Geoff Sutcliffe: TPTP World Standards and Tools for Tarskian and Kripke Interpretations  
14:50 Antti Hyvärinen: Formal Verification at Certora  
15:30 Cake  
16:00 Alex Steen: Finding Short Proofs  
16:40 Florian Rabe: Aspects of Knowledge for Next Generation Systems  
17:20 Catherine Dubois: (Re)Verification of Proofs with Coq or Dedukti  
18:00 Dinner

**Friday November 24, 2023**

09:00 Konstantin Korovin: Analyzing and Optimizing Systems Represented by Nonlinear Arithmetic  
09:30 Martin Desharnais: An Isabelle/HOL Formalization of the SCL(FOL) Calculus  
10:00 Nick Smallbone: Extending a Unit Equality Prover  
10:30 Coffee/Tea break  
11:00 Jakob Nordström: A Unified Proof System for Discrete Combinatorial Problems  
11:40 David Déharbe: On Formal Verification at CLEARSY  
12:15 Lunch