



			Room A	Room B	Room C			
July 24	09:00-10:00	Invited Talk/Busi	Stein	-	-			
	10:00-10:20	break						
	10:20-12:00	session	12 - Computational Algebraic Geometry	4 - Polyhedral methods in geometry and optimization	6 - Post Quantum Groups			
	talks		1 Alicia Dickenstein, Mercedes Perez Millan, Anne Shiu, and Xiaoxian Tang - Investigating multi	Xavier Allamigeon - First steps in the formalization of convex polyhedra in Coq	Bianca Sosnovski, Recents Developments in Cayley Hash Functions			
			2 Ethan Petersen, Nora Youngs, Ryan Kruse, Dane Miyata, Rebecca Garcia, Luis David Garcia	Ben Braun - Counting lattice points in lattice polytopes	Kelsey Horan, The Hidden Subgroup Problem and Post-quantum Group-based Cryptography			
			3 Hashemi et al. - Universal Groebner Basis for Parametric Polynomial Ideals	Leon Eiffier - Investigating Chvatal's conjecture using exact SCIP and VIPR	Alexander Wood, Private-Key Fully Homomorphic Encryption for Private Classification			
			4	Michael Joswig - Enumerating triangulations of cyclic polytopes	Jonathan Gryak, Cryptanalysis of Group-Theoretic Cryptosystems via Machine Learning			
	12:00-13:30	lunch						
	13:30-15:10	session	12 - Computational Algebraic Geometry	4 - Polyhedral methods in geometry and optimization	6 - Post Quantum Groups			
	talks		5 Nida Obatake - The capacity for Hopf bifurcations in the fully distributive dual-site phosphorylat	Taylor Brysiewicz - Numerical Software for Computing Newton Polytopes	Mariya Bessonov, A framework for unconditionally secure public-key encryption (with possible decryption errors)			
			6 Jonathan Hauenstein, Avinash Kulkarni, Emre C. Sertöz, and Samantha Sherman - Certifying	Jeff Sommars - Computing tropical prevarieties	Zoran Sunic, Quadratic time algorithm for inversion of binary permutation polynomials			
			7 Robert H. Lewis - Image Analysis: Identification of Objects via Polynomial Systems	Ruriko Yoshida - Tropical Principal Component Analysis and its Applications to Phylogenetics	Matluba Khodjaeva, Efficient and Secure Delegation to a Single Malicious Server: Exponentiation over Non-Abelian Groups			
			8 Dan Bates, Danielle Brake, Matt Niemerg - Paramotopy: Parameter homotopies in parallel	Yue Ren - Tropicalized quartic curves of genus 3				
	15:10-15:30	break						
	15:30-17:10	session	12 - Computational Algebraic Geometry	14 - Towards Composable Mathematical Software	1 - General Session			
	talks		9 Michael Burr, Juan Xu, and Chee Yap - Software for Certifying Homotopy Continuation Paths:	Michael Kohlhasse - Composing Mathematical Software Systems via the Math-in-the-Middle Paradigm	Michael Monagan and Baris Tuncer: Sparse multivariate polynomial factorization: a high-performance design and implementation.			
			10 Margaret Regan, Jonathan Hauenstein, Danielle Brake - polyTop: Software for computing topc	William Stein - SageMath: an approach to unifying open source mathematical software	Annie Cuyt, Engelbert Tijskens, Matteo Briani, Ferre Knaepkens and Wen-Shin Lee: SPARSIMATICS: a mathematics toolbox for sparse problems			
			11 Tianran Chen - Libtropicon: a highly scalable library for computing intersections of tropical hyp	Sebastian Gutsche - Integrating GAP and Julia - JuliaInterface and Gap.jl	Michela Ceria, Teo Mora and Andrea Visconti: Efficient computation of squarefree separator polynomials			
			12 Anton Betten - Classifying Cubic Surfaces over Small Finite Fields	Tim Daly - Proving Axiom Sane	Oleg Marichev: Computability of general integrals and integral transforms			

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July 25	09:00-10:00	Invited Talk/Busi	Hales	-	-						
	10:00-10:20	break									
	10:20-12:00	session	12 - Computational Algebraic Geometry	15 - Management of Mathematics	2 - Algorithms and Applications for Curves and Surfaces						
	talks		1 Jaime Gutierrez, Jorge Jimenez Urroz - Eisenstein criteri	Daniel S. Katz and Neil Chue Hong -- Software	Mourrain -- Axi, a geometric modeler for semi-algebraic shapes						
			2 Sascha Timme - HomotopyContinuation.jl: A package for	Hagen Chrapary and Wolfgang Dalitz -- Software	Caravantes, Gonzalez-Vega: On the interference problem for ellipsoids: new closed form solutions and applications						
			3 Anton Leykin - Homotopy continuation in Macaulay2	Michael Kohlase -- Math Object Identifiers --	Lewis -- Resultants, Implicit Parameterizations, and Intersections of Surfaces						
			4 Jose Rodriguez - Implementations of symbolic-numeric e	Wolfram Sperber -- Mathematical research da	Burr -- Practical Considerations for Subdivision-based Algorithms for Curves and Surfaces						
	12:00-13:30	lunch									
	13:30-15:10	session	11 - Backtrack search techniques in groups and combin	15 - Management of Mathematics/19 - Formal	2/3 - Algorithms and Applications for Curves and Surfaces/Symbolic Summation and Integration						
	talks		5 Chris Jefferson -- The Theory and Practice of Refiners in	Katja Berčič and Janoš Vidali -- Towards a fin	Pataranutaporn -- de Boor-suitable (DS) T-splines						
			6 Paula Hahndel, Rebecca Waldecker -- Questions on orb	Urban -- First Experiments with Neural Transl	Yap -- A New \$epsilon\$-Isotopic Curve Tracing via Subdivision						
			7 Robin Candy -- Towards practical subgroup conjugacy	Dong -- NLP and Large-scale Information Retr	Cheng -- Plotting real planar implicit curves and its applications						
			8 Mattias Koch -- Using Strong Paths to Solve Isomorphisr	Farmer -- A New Style of Mathematical Proof	Wong - Proving and Conjecturing Bounds for some Floor Function Sums						
	15:10-15:30	break									
	15:30-17:10	session	11 - Backtrack search techniques in groups and combin	19 - Formal and Informal Corpora	3 - Symbolic Summation and Integration						
	talks		9 Anton Betten -- How fast can we compute orbits of group	Carneiro -- The Lean 3 Mathematical Library	Chen - Additive Decompositions in Primitive Extensions						
			10 Betten et al -- A Rainbow Clique Search Algorithm for BL	Lewis -- A Bi-directional Extensible Ad Hoc Int	Jiu - Bernoulli Symbol and Sum of Powers						
			11 Markus Pfeiffer -- Backtrack Search in the Free Group	Kapulkin -- Is Univalence Inevitable?	Kapadia - Asymptotic Expansions						
			12 Mun See Chang -- Normalisers in permutation groups as	McAllester -- Set-Theoretic Type Theory	Marichev - Computability of general integrals and integral transforms						

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July 26	09:00-10:00	Invited Talk/Busi	Bornemann	-	-						
	10:00-10:20	break									
	10:20-12:00	session	8 - Machine Learning for Mathematical Softw	10 - Mathematical Interfaces	7 - Groebner bases						
	talks		1 England - ML for MS	Kang et al - Mathematics Classroom Collab	Moved to Tuesday 11:10: Hashemi et al. - Universal Groebner Basis for Parametric Polynomial Ideals						
			2 Kobayashi et al - Ordering of subformulas	Kim et al - Identification of Errors	Perry - The Dynamic F4 Algorithm						
			3 Sturm - Reduce Switch Points	Noda et al - CindyJS	Lichtblau - Solving Polynomial Systems using Numeric Groebner Bases						
			4 Forrest - Deep Learning in Maple	Nakamura et al - Analyses of pen-based in	Kauers - Checking Circuits for Integer Multiplication using Groebner bases						
	12:00-13:30	lunch									
	13:30-15:10	session	8 - Machine Learning for Mathematical Softw	10 - Mathematical Interfaces	7 - Groebner bases/20 - Software for Mathematical Reasoning						
	talks		5 Urban - ML for AR	Yoshitomi - Generation of abundant questio	Liu - Application of Groebner bases to Geometrically Nonlinear Analysis of Circular Plates on Pasternak Foundation						
			6 Dong - Mathematical Subject Classification	Shirai et al - Intelligent editor	Palancz et al. - Fitting a Sphere to Point Cloud Data via Computer Algebra						
			7 Gryak et al. - Solving Algorithmic Problems v	Zeng - Intuitive interface for solving eauations							
			8 Abraham - Heuristics in SMT	Sanderson et al - Sparse matrix class in C++							
	15:10-15:30	break									
	15:30-17:10	session	9 - SCSC	10 - Mathematical Interfaces	20 - Software for Mathematical Reasoning						
	talks		9 Abraham and Kremer - Incremental CAD	Martins et al - Francy							
			10 Vale-Enriquez and Brown - UNSAT cores in	Woodroofe - GAP should move beyond the terminal							
			11 Horacek and Kreuzer - 3BA	Bercic et al - DiscreteZoo							
			12 Bright et al - MathCheck	Rao et al - NetPad							

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July 27	09:00-10:00	Invited Talk/Busi	Business meeting	-	-	
	10:00-10:20	break				
	10:20-12:00	session	9 - SCSC/18 - Quantifier Reasoning	16 - Software for exact and certified numeric computations	13 - Symbolic Combinatorics	
	talks		1 Lisitsa - Andrew Curtis Conjecture	Johansson - Numerical integration in arbitrary-precision ball arithmetic	Pantone - guessfunc	
			2 Mulligan et al - Economics	Ren - Tropical basis verification and its applications	Rowland - IntegerSequences	
			3 Gao - dReal	Leykin - D-finite certification	Wilson - multivariate asymptotics	
			4 Kauers - Symmetries for QBF	Imbach et al - Implementation of a Near-Optimal Complex Root Clustering Alg	Melczer - PI4 program	
	12:00-13:30	lunch				
	13:30-15:10	session	18 - Quantifier Reasoning	16/1 - Software for exact and certified numeric computations/General session		
	talks		5 Urban - Instantiations	Mou - On Parametric GCD		
			6 Chew - QBF proofs systems	Jing Yang and Chee K. Yap: On $\mu$ -Symmetric Polynomials and D-plus		
			7 Barbosa - unification in HOSMT	Vincel Hoang Ngoc Minh: On the global renormalization and regularization of several complex variables zeta functions by computer		
			8 Janota - ML for QBF			
	15:10-15:30	break				
	15:30-17:10	session				
	talks		9			
			10			
			11			
			12			