Wednesday, November 15

08:30-09:00	Registration, opening		08:30-09:00
09:00-10:00	Invited talk. Bruno Buchberger. Teaching Math to Lady M. Session Chair: Temur Kutsia		09:00-10:00
10:00-10:30	Coffee break		10:00-10:30
	Room 1	**Room 2**	
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.1 Chair: Matthew England**		
10:30-11:00	Daniel J. Bates, Dani Brake, Jonathan Hauenstein, Andrew Sommese and Charles W. Wampler Homotopies for connected components of algebraic sets with application to computing critical sets		
11:00-11:30	Alexander Levin Dimension Quasi-polynomials of Inversive Difference Field Extensions with Weighted Translations		
11:30-11:45	Ryoya Fukasaku and Yosuke Sato On Real Roots Counting for Non-radical Parametric Ideal		
11:45-12:00	Xavier Dahan On the bit-size of non-radical triangular set		
12:00-14:00	Lunch		12:00-14:00
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.2 Chair: Zafeirakis Zafeirakopoulos**	**Track 3: Data Modeling and Analysis** **Session: 3.1 Chair: Alex Karagrigoriou**	
14:00-14:30	Jonathan Hauenstein Certification using Newton-invariant subspaces	Václav Blažej, Tomáš Valla and Ondrej Suchy A Simple Streaming Bit-parallel Algorithm for Swap Pattern Matching	14:00-14:30
14:30-15:00	Joris van der Hoeven and Bernard Mourrain Efficient certification of numeric solutions to eigenproblems	Christina Parpoula, Alex Karagrigoriou and Angeliki Lambrou Epidemic Intelligence Statistical Modelling for Biosurveillance	14:30-15:00
15:00-15:30	Joris van der Hoeven, Robin Larrieu and Gregoire Lecerf Implementing fast carryless multiplication	Ritu Kundu and Toktam Mahmoodi Mining Acute Stroke Patients' Data using Supervised Machine Learning	15:00-15:30
15:30-15:45	Heba Al Kafri, David J. Jeffrey and Robert M. Corless Rapidly convergent integrals and function evaluation	Patrick Traxler and Alexander Kogler Parallel and Robust Empirical Risk Minimization via the Median Trick	15:30-16:00
15:45-16:00	David J. Jeffrey and Nick Murdoch Stirling Numbers, Lambert W and the Gamma Function		
16:00-16:30	Coffee break		16:00-16:30
		Track 4: Mathematical Aspects of Information Security and Cryptography **Session: 4.1 Chair: Temur Kutsia**	
		Johannes Blömer and Gennadij Liske Subtleties in Security Definitions for Predicate Encryption with Public Index	16:30-17:00
		Filip Zagorski, Michal Kulis and Pawel Lorek A leakage resilient shuffling	17:00-17:30
		Edoardo Persichetti Code-based Key Encapsulation from McEliece's Cryptosystem	17:30-17:45

Thursday, November 16			
09:00-10:00	Invited talk. Dongming wang. Characteristic Decomposition of Polynomial Sets. Session Chair: Johannes Blömer		09:00-10:00
10:00-10:30	Coffee break		10:00-10:30
	Room 1	**Room 2**	
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.3 Chair: Xavier Dahan**		
10:30-11:00	Martin Wilhelm Balancing expression dags for more efficient lazy adaptive evaluation		
11:00-11:30	Stefan Schirra and Martin Wilhelm On Interval Methods with Zero Rewriting and Exact Geometric Computation		
11:30-12:00	Tomasz Dobrowolski Improving Enclosure of Interval Scalar Projection Operation		
12:00-14:00	Lunch		12:00-14:00
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.4 Chair: Ilias Kotsireas**	**Track 2: Combinatorics and Codes in Computer Science** **Session: 2.1 Chair: Stefan Schirra**	
14:00-14:30	Joris van der Hoeven Fast Chinese remaindering in practice	Thi Thu Huong Tran, Phan Thuan Do and Vincent Vajnovszki Right-justified characterization for generating regular pattern avoiding permutations	14:00-14:30
14:30-15:00	Steven Thornton, Marc Moreno Maza and Robert Corless Jordan Canonical Form with Parameters From Frobenius Form with Parameters	Vedran Krcadinac and Mario Osvin Pavcevic New small 4-designs with nonabelian automorphism groups	14:30-15:00
15:00-15:30	Jouhayna Harmouch, Bernard Mourrain and Houssam Khalil Decomposition of Low Rank Multi-Symmetric Tensor	Dieter Jungnickel, Spyros Magliveras, Vladimir Tonchev and Alfred Wassermann On Classifying Steiner triple systems by their 3-rank	15:00-15:30
15:30-16:00	Qiao-Long Huang and Xiao-Shan Gao Sparse Rational Function Interpolation with Finitely Many Values for the Coefficients	Vissarion Fisikopoulos and Zafeirakis Zafeirakopoulos Experimental Study of the Ehrhart Interpolation Polytope	15:30-15:45
		Takunari Miyazaki On Testing Isomorphism of Graphs of Bounded Eigenvalue Multiplicity	15:45-16:00
16:00-16:30	Coffee break		16:00-16:30
		Track 4: Mathematical Aspects of Information Security and Cryptography **Session: 4.2 Chair: Johannes Blömer**	
		Georgios Fotiadis and Elisavet Konstantinou Ordinary Pairing-Friendly Genus 2 Hyperelliptic Curves with Absolutely Simple Jacobians	16:30-17:00
		Pawel Lorek, Marcin Slowik and Filip Zagorski Statistical testing of PRNG: generalized gambler's ruin problem	17:00-17:30

Friday, November 17			
09:00-10:00	Tutorial. Ilias Kotsireas. All kinds a new Maple packages, remind me of You. Session Chair: Dimitris Simos		09:00-10:00
10:00-10:30	Coffee break		10:00-10:30
	Room 1		
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.5 Chair: Alexei Lisitsa**		
10:30-11:00	Michael Kohlhase, Dennis Müller, Markus Pfeiffer, Florian Rabe, Nicolas M. Thiéry, Victor Vasilyev and Tom Wiesing Knowledge-Based Interoperability for Mathematical Software Systems		
11:00-11:30	Tom Wiesing, Michael Kohlhase and Florian Rabe Virtual Theories – A Uniform Interface to Mathematical Knowledge Bases		
11:30-12:00	Cezary Kaliszyk and Karol Pąk Isabelle Formalization of Set Theoretic Structures and Set Comprehensions		
12:00-14:00	Lunch		12:00-14:00
	Track 1: Foundation of Algorithms in Mathematics, Engineering & Scientific Computation **Session: 1.6 Chair: Temur Kutsia**		
14:00-14:15	James H. Davenport and Matthew England The Potential and Challenges of CAD with Equational Constraints for SC-Square		
14:15-14:45	Alexei Lisitsa and Alexei Vernitski Automated reasoning for knot semigroups and pi-orbifold groups of knots		
14:45-15:15	Jan Horacek, Jan Burchard, Bernd Becker and Martin Kreuzer Integrating Algebraic and SAT Solvers		
15:15-15:30	Closing remarks		