

CASc 2025		Schedule		Knowledge Village, Dubai, UAE	
Monday Nov. 24		Tuesday Nov. 25		Wednesday Nov. 26	
9:00-9:30		<p><i>Session Chair: TBA</i> Michael Monagan and Garrett Paluck A New Black Box GCD Algorithm Using Hensel Lifting</p>	<p><i>Session Chair: TBA</i> Evgenii Vorozhtsov Polynomial Decomposition with the Aid of the Lagrange-Bürmann Formula</p>	<p><i>Session Chair: TBA</i> Svetlana Selivanova and Holger Thies Solving Differential Equations in Exact Real Arithmetic and Applications to High-Precision Computations</p>	<p><i>Session Chair: TBA</i> Anastasia Medvedeva Generation of a Patient's Visual Field Data for Automatic Detection of Glaucoma with Wolfram Mathematica</p>
9:30-10:00		<p>Mei Tan and Jing Yang Subresultant of Bernstein Polynomials and Its Application in Computing the Parametric Greatest Common Divisor</p>	<p>Rikuna Tokuda and Hiroshi Sekigawa An Approximate Decomposition of a Multivariate Polynomial Based on Structured Low-Rank Approximation</p>	<p>Amir Hashemi, Rodrigo Iglesias, Matthias Orth, Eduardo Eduardo Saenz-de-Cabezon, and Werner M. Seiler Effective Methods for Janet(-like) Completion</p>	<p>Ruiqi Huang, Anton Leykin, and Michela Mancini Projective Plane Subdivision Method for Initial Orbit Determination</p>
10:00-10:30	Registration & Opening	<p>Amir Hashemi, Rozhin Sadr, and Werner M. Seiler On the Computation of Axial Constants and Sectional Regularities</p>	<p>Mahsa Ansari and Michael Monagan A Failure Probability Analysis of a Modular Algorithm to Compute the Monic GCD of Multivariate Polynomials over Algebraic Number Fields $\mathbb{Q}(a_1, \dots, a_n)$</p>	<p>Yulia Mukhina and Gleb Pogudin Support Bound for Differential Elimination in Polynomial Dynamical Systems</p>	<p>Sergey Gutnik Symbolic Computation of the Periodic Planar Oscillations of Two-Body System in an Elliptic Orbit</p>
10:30-11:00		Coffee break			
11:00-11:30	<p><i>Session Chair: TBA</i> Arthur C. Norman and Stephen M. Watt Software Portability for Computer Algebra</p>	<p>Kosuke Sakata and Tsuyoshi Takagi An Algorithm for Computing the Leading Monomials of a Minimal Gröbner Basis of Generic Sequences</p>	<p>Kazuki Komine, Akira Katayama, and Masaya Yasuda A Hybrid Approach to Speeding Up Schoof's Algorithm on Supersingular Elliptic Curves</p>	<p>Greg Alejandro Solis-Reyes, Marc Moreno Maza, and Alexander Brandt Parallel Computation of the Power Series Solutions to Linear Ordinary Differential Equations</p>	<p>Valentin Irtegov and Tatiana Titorenko On Stationary Motions in the Generalized Problem of the Chaplygin Ball</p>
11:30-12:00	<p>Johnny Joyce and Jan Verschelde Computing Linear Regions in Neural Networks with Skip Connections</p>	<p>Ilias Kotsireas Constructive Combinatorics and Computer Algebra</p>	<p>Ryo Ohashi and Momonari Kudo On Superspecial Hyperelliptic Curves of Genus 5 whose Automorphism Groups Contain C_{2^3}</p>	<p>Abdul Jarrah Invariants of Polynomial Systems of ODEs</p>	<p>Takumu Okazaki, Akira Terui, and Masahiko Mikawa Inverse Kinematics for a 6-Degree-of-Freedom Robot Manipulator Using Comprehensive Gröbner Systems</p>
12:00-12:30	<p>Leonid Chilikov and Victor Selivanov Ordered Fields and Grzegorzczak's Hierarchy</p>		<p>Tomoki Moriya, Hiroshi Onuki, Yusuke Aikawa, and Tsuyoshi Takagi Lower Bounds of Costs of 3-Isogenies Formulas in the Framework of Generalized Montgomery Coordinates</p>		<p>Takumu Okazaki, Akira Terui, and Masahiko Mikawa An Effective Trajectory Planning and an Optimized Path Planning for a 6-Degree-of-Freedom Robot Manipulator</p>
12:30-14:00	Lunch break				
14:00-14:30	<p><i>Session Chair: TBA</i> Raphael Jolly Implicit Conversions in the Scala Computer Algebra System</p>	<p><i>Session Chair: TBA</i> Aras Bacho and Martin Ziegler Second-Order Parameterizations for the Complexity Theory of Integrable Functions</p>	Excursion	<p><i>Session Chair: TBA</i> Momonari Kudo and Kazuhiro Yokoyama Several New Upper-Bounds for Maximal Gröbner Basis Degree under Semi-Regularity Assumptions</p>	
14:30-15:00	<p>Katsusuke Nabeshima and Shinichi Tajima Standard Bases and Noetherian Operators for Zero-Dimensional Ideals</p>	<p>David J. Jeffrey, Qingze Li, and Robert Corless Computation of Stirling Numbers for Complex Arguments</p>		<p>Zhaoxing Qi and Linpeng Wang Choosing Variable Orderings Based on Elimination Tree for Sparse Triangular Decomposition</p>	
15:00-15:30	<p>Victor Edneral Package NORT for Reducing ODE Systems to Normal Form</p>	<p>Paco Jain, Oleg Marichev, Timur Sadykov, and Elina Shishkina Advanced Symbolic Integration of the Fox H-Function Products</p>		<p>Maximilian Heisinger and Clemens Hofstadler f4ncgb: High Performance Gröbner Basis Computations in Free Algebras</p>	
15:30-16:00	Coffee break	Coffee break		Coffee break	
16:00-16:30	<p>Oleg Kovalev, Batgerel Balt, Alexander Gusev, Le Hai Luong, Vladimir Derbov, Ochbadrakh Chuluunbaatar, Sergue Vinitzky, and Peiwei Wen Symbolic-Numerical Algorithms for Solving Multidimensional Boundary Value Problems by Finite Element Method on Hypercubes</p>	<p>Alexei Uteshev, Elizabeth Kalinina, and Marina Goncharova Hankel Polynomials and their Zeros</p>	Business Meeting		
16:30-17:00	<p>Yuki Ishihara and Kazuhiro Yokoyama Effective Hilbert's Irreducibility Theorem for Primary Ideals</p>	<p>Jan Verschelde and Kylash Viswanathan Extrapolating on Taylor Series Solutions of Homotopies with Nearby Poles</p>			
17:00-17:30					
17:30-18:00					
18:00-21:00			Conference Dinner		