Monday

10:30-12:00 room A (SS8)

- Frédéric Chyzak - Computing D-Finite Symmetric Scalar Products in Order to Count Regular Graphs
- Shachar Weinbaum - Conservative Matrix Fields - Algebra and Asymptotics
- Ali K. Uncu - A MacMahon Partition Analysis View of Cylindric Partitions

10:30-12:00 room B (SS7)

- Rob Corless - Analysis vs algebra in symbolic computation
- Lihong Zhi - Symbolic-Numeric Computation
- Jürgen Gerhard - A personal history with computer algebra

10:30-12:00 room C (SS2)

- AmirHosein Sadeghimanesh - Using ML tools to predict number of solutions of parametric system of polynomial equations with the help of CRNs
- Sofia Triantafyllou - Learning treatment effects from multiple data
- Jack Jansma - Bayesian inference of interaction rates in a metabolite-bacteria network using time-series counts

10:30-12:00 room D (SS9)

- Elena Sammarco - Constructing nonspecial divisors in the moduli space of cubic fourfolds
- Özhan Genç - Homogenous Instanton Bundles on Grassmannians
- Simone Pesatori - The moduli space of rational elliptic surfaces

12:30-13:30 room A (Invited Talk)

- Veronika Pillwein - Sequences and series beyond holonomic

15:00-16:30 room A (SS8)

- Manuel Kauers - Non-Minimality of Minimal Telescopers Explained by Residues
- Bertrand Teguia Tabuguia - Guessing and arithmetic of D-algebraic sequences
- Jakob Obrovsky - A direct solver for coupled systems of recurrence equations over $\Pi\Sigma^*$-fields

15:00-16:30 room B (SS7)

- Stephen Watt - Portability of early CAS
- Michael Wester - 30 Years of Applications of Computer Algebra (ACA), A Personal Perspective
- David Jeffrey - Soft Warehouse, Derive and Computer Algebra

15:00-16:30 room C (SS2)

- Bryan Hernandez - Analyzing the dynamics and structure of biochemical reaction networks via network decomposition
- Ovidiu Radulescu - Graph-Theoretic Algorithms for Reducing Chemical Reaction Networks

15:00-16:30 room D (SS9)

- Meirav Amram (Topol) - Computational Classification and Generation of Algebraic Surfaces and Curves via Algorithms
- Gal Goren - Computational Generation of Zariski Pairs in Conic-Line Arrangements
- Sara Asensio - On the shape of Betti diagrams of edge ideals

17:00-19:00 room A (SS4)

- Bo Huang - Integrability and Linearizability of a Family of Three-Dimensional Polynomial Systems
- Varadharaj RaviSrinivasan - Iterated strongly normal extensions and nonlinear differential equations
- Roberto La Scala - Stream cipher over Finite Fields: A Difference Algebra Approach
- Alexander Levin - Gröbner type Bases with Respect to the Effective Order and Bivariate Dimension Polynomials of Difference Modules

17:00-19:00 room B (SS18)

- Jianqiang Zhao - Unramified Variants of Motivic Multiple Zeta Values
- Steven Charlton - Goncharov's Programme, and Symmetries of Weight 6 Multiple Polylogarithms
- Vincel Hoang Ngoc Minh - Solutions of Knizhnik-Zamolodchikov equation by dévissage
- Gérard H. E. Duchamp - Extension by continuity of the domain of Poly- and Hyper-logarithms

17:00-19:00 room C (SS1)

- William Bauldry - Creating Stand-Alone Workspaces for Student Explorations with Maple
- Magdalena Skrzypiec - CAS and Improper Integral - a case study
- Michel Beaudin - Questions and ideas from deceased colleagues that help us carry on (I)
- Michel Beaudin - Questions and ideas from deceased colleagues that help us carry on (II)

17:00-19:00 room D (SS9)

- Barbara Betti - Khovanskii bases in computer algebra
- Yota Maeda - Geometric Foundations for Transformer in Gröbner Basis Computation
- Martin Weimann - Improving convex-dense bivariate factorization
- Florent Corniquel - Solving parametric polynomial systems using generic Rational Univariate Representation

Tuesday

9:00-10:30 room A (SS10)

- Hadrien Brochet - Faster multivariate integration in D-modules
- Sergei Abramov - The indicial equation of the product of linear ordinary differential operators
- Manfred Buchacher - Separated Variables on Plane Algebraic Curves

9:00-10:30 room B (SS1)

- Michael Monagan - Mathematical Experiments for Mathematics Majors
- Margherita Guida - An educational proposal to interpret linear systems
- Masaki Suzuki - Cooperation of KeTCindyJS and Maxima

9:00-10:30 room C (SS3)

- Maria Chlouveraki - Blocks and Schur elements for Hecke algebras of exceptional complex reflection groups
- Ilias Andreou - The representations of the Brauer-Chen algebra associated to the exceptional complex reflection groups
- Götz Pfeiffer - Reflection Groups in the Light of Formal Concept Analysis

9:00-10:30 room D (SS13)

- Buket Özkaya - Characterization of Nearly Self-Orthogonal Quasi-Twisted Codes and Related Quantum Codes
- Burcu Gülmez Temür - On the complete characterization of a class of permutation trinomials in characteristic five
- Chiara Castello - Some constructions of asymptotically optimal cyclic subspace codes

11:00-12:00 room A (SS10)

- Cyrille Chenavier - Topological closure of formal powers series ideals and application to topological rewriting theory
- Thierry Combot - Hypergeometric solutions of elliptic difference equations

11:00-12:00 room B (SS6)

- George Labahn - Tools for fast computation of integer matrix normal forms
- Arne Storjohann - Computing Hermite normal forms of integer matrices faster

11:00-12:00 room C (SS3)

- Benedek Dombos - Decomposition of affine crystals in levels 1 and 2
- Dinushi Munasinghe - Steadied quotients of KLR algebras

11:00-12:00 room D (SS13)

- Daniel Panario - Girth Analysis of Quantum Quasi-Cyclic LDPC Codes
- Giovanni Longobardi - Scattered trinomials of $F_{q^6}[X]$ in even characteristic

12:30-13:30 room A (Invited Talk)

- Gianira Nicoletta Alfarano - Skew-polynomial rings and algebraic coding theory

15:00-16:30 room A (SS10)

- Florian Fürnsinn - An Effective Version of the Grothendieck p-curvature Conjecture for Order One Differential Equations
- Khalil Ghorbal - The Shimizu-Morioka System Has No Nontrivial Darboux Polynomials
- Vincel Hoang Ngoc Minh - Solutions of Knizhnik-Zamolodchikov equation by dévissage

15:00-16:30 room B (SS2)

- Atsushi Mochizuki - Biological functions and functional modules originated in the structure of chemical reaction network
- Andrzej Mizera - Graph Neural Network-Based Reinforcement Learning for Controlling Biological Networks - the GATTACA framework
- Fabrice Rouillier - On solving parametric systems

15:00-16:30 room C (SS3)

- Christos Tatakis - Toric ideals of graphs minimally generated by a Gröbner basis
- Angeliki-Aikaterini Metallinou - Matroids
- Maria Chatzikyriakou - Coxeter groups via Cartan matrices

15:00-16:30 room D (SS13)

- Iliya Bouyukliev - Graph isomorphism and isomorphism of binary matrices
- Mariya Dzhumalieva-Stoeva - Enumeration of optimal binary and ternary linear codes with different hull dimensions
- Maryam Bajalan - On the minimum distance and covering radius of irredundant orthogonal arrays

17:00-19:00 room A (SS10)

- Clemens Hofstadler - Recent Advancements in Noncommutative Gröbner Basis Software
- Antonio Jiménez-Pastor - Computing centralizers for linear differential operators
- Manuel Kauers - A Shape Lemma for Ideals of Differential Operators
- Alexander Levin - Generalized Gröbner Bases and Dimension Polynomials of D-modules

17:00-19:00 room B (SS2)

- Robert Lewis - New Results about Bricard's Flexible Octahedra
- Marcus Aichmayr - Reaction networks with (generalized) mass-action kinetics: Sign vector conditions for the existence of a unique general equilibrium
- Nicola Vassena - Symbolic bifurcation analysis of reaction networks with Python. Part I: Theory
- Richard Golnik - Symbolic bifurcation analysis of reaction networks with Python. Part II: Implementation

17:00-19:00 room C (SS1)

- Yasuyuki Kubo - Utilization of Algebrite in KeTLTS
- Chieko Komoda - Automatic Grading of Online Graph Plotting Problems
- Setsuo Takato - Two Methods for Proving 'Japanese Theorem II' Using Maxima and KeTCindy: An Application of the MNR Method
- Koji Nishiura - Educational Applications of Solving Sangaku Problems by the MNR Method with Maxima

17:00-19:00 room D (SS13)

- Peter Boyvalenkov - On a spherical code with 2025 points
- Peter Dragnev - Universal polarization of sharp codes in the Leech lattice
- Stefka Bouyuklieva - On the hulls of linear codes
- Stela Zhelezova - Resolutions of cyclic 2-(40,4,1) designs

Wednesday

9:00-10:30 room A (SS16)

- Qingwen Wang - The generalized hand-eye calibration equation and its application
- Dingkang Wang - On minor prime factorization for rank-deficient multivariate polynomial matrices
- Yang Zhang - Solving reduced biquaternion tensor equations and applications

9:00-10:30 room B (SS1)

- Eli Bagno - Collaboration with ChatGPT for research and teaching in algebraic combinatorics
- Piedad Tolmos - Evaluation of the difficulty of a geometric statement: comparing ChatGPT and GeoGebra Discovery
- Thierry Noah Dana-Picard - Automated methods applied for the exploration of singularities of some curves

9:00-10:30 room C (SS14)

- Lucas Da Silva Reis - Nilpotent linearized polynomials and applications
- Giorgos Kapetanakis - Normal and primitive normal elements with prescribed traces in intermediate extensions of finite fields
- Domingo Gómez-Pérez - Automatic Sequences Along Polynomial Subsequences and Their Applications

11:00-12:00 room A (SS16)

- Mengyan Xie - Fixed-Time Tensor Gradient Neural Network for Online Sylvester Tensor Equation Solving
- Xiaodong Zhang - The A_α-spectral radius of uniform hypergraphs

11:00-12:00 room B (SS3)

- Daniel Juteau - The exotic nilCoxeter algebra for G(m, m, 3)
- Kostas Psaromiligkos - The generalized Springer correspondence for disconnected reductive groups

11:00-12:00 room C (SS18)

- Jean-Yves Enjalbert - Multiplicative structure of some multivariate functions
- Olivier Bouillot - Multiple Divided Bernoulli Polynomials and Numbers

Thursday

9:00-10:30 room A (SS9)

- Werner M. Seiler - Deterministic Determination of Axial Constants and Sectional Regularities
- Alessandro Neri - Combinatorics of Schubert Cells in Random Network Coding
- Matthias Orth - The Gröbner basis for powers of a general linear form in a monomial complete intersection

9:00-10:30 room B (SS8)

- Julien Roques - A purity theorem for Mahler equations
- Georg Regensburger - Integro-differential rings and generalized shuffle relations
- Robert Green - Non-commutative D-finite & D-algebraic power series and formal languages

9:00-10:30 room C (SS7)

- Michael Monagan - A history of efficiency problems in Maple
- Sasaki Tateaki - Symbolic computation in 1974-1976 in Japan
- Arthur Norman - 60+ years of applications: a perspective from Reduce

9:00-10:30 room D (SS17)

- Valentina Pepe - Codes deriving from some subvarieties of the Segre variety
- Rocco Trombetti - On the minimum weight of some geometric codes
- Michael Schaller - Lattices over Non-Archimedean Fields and Their Applications to Coding Theory

11:00-12:00 room A (SS9)

- Abhiram Natarajan - Gröbner bases native to finitely generated commutative algebras with term order, with application to the Hodge algebra of minors
- Pietro Sabatino - A computer-aided construction of non-homeomorphic double Kodaira fibrations that possess the same biregular invariants

11:00-12:00 room B (SS5)

- Haiduke Sarafian - Kinematics of a point-like charge particle in nontrivial nonhomogeneous electric fields of charged washers
- Haiduke Sarafian - Oscillation analysis of a bifilar pendulum with Mathematica

11:00-12:00 room C (SS15)

- Fredrik Johansson - Vector-friendly numbers with n-word precision
- Long Qian - Logical Completeness of Differential Equations

11:00-12:00 room D (SS17)

- Cristina Fernández-Córdoba - Hamming weight distributions of linear simplex codes over finite chain rings and their Gray map
- Carlos Vela Cabello - On some properties of the Gray map

12:30-13:30 room A (Invited Talk)

- Ioannis Emiris - A sparse overview of sparse elimination

13:00-16:30 room A (SS10)

- Tobias Metzlaff - Combining Sparsity and Symmetry Exploitation for SOS-Certificates
- Yulia Mukhina - New algorithm for differential elimination based on support bound
- Bertrand Teguia Tabuguia - Closed forms of power series with hypergeometric-type terms

15:00-16:30 room B (SS5)

- Saltanat Bizhanova - Study of the secular perturbations in the three-planetary four-body problem with isotropically varying masses
- Alexander Prokopenya - Secular perturbations in the four-body system with anisotropically varying masses
- Alexander Prokopenya - Symbolic computations in studying the stability of nonlinear oscillations of the mathematical pendulum

13:00-16:30 room C (SS15)

- Barbara Betti - Proudfoot-Speyer degenerations of scattering equations
- Alexandre Guillemot - Braid monodromy computations using certified path tracking
- Fabrice Rouillier - Some challenges and applications for continuation methods for solving algebraic systems

15:00-16:30 room D (SS17)

- Julia Lieb - Construction of partial unit-memory MDP convolutional codes with low encoding and decoding complexity
- Elisa Junghans - Construction of LDPC convolutional codes from Latin squares
- Tefjol Pllaha - Quantum LDPC codes and decoding challenges

17:00-19:00 room A (SS10)

- Chia Zargeh - An algorithmic problem for Nijenhuis Lie algebras
- Peter Krug - Undecidability of Noncommutative Ideal Membership and Counterexamples of Operator Statements
- Yi Zhang - The Expansion Complexity of Ultimately Periodic Sequences over Finite Fields

17:00-19:00 room B (SS5)

- Ryszard Kozera - Convergence order in trajectory estimation with piecewise Bezier cubic curves based on reduced data
- Arkadiusz Orłowski - Possible orderings of mode, median, and mean in unimodal distributions
- Arkadiusz Orłowski - Classification of universal decision elements using computer algebra system
- Setsuo Takato - An attempt to create teaching materials for the Brachistochrone curve using Algebrite and KeTLTS

17:00-19:00 room C (SS11)

- Annie Cuyt - Sparse Interpolation in CS&E
- Ramonika Sengupta - A Fast Exponential Analysis and Variable Projection Based Method for Linear Antenna Array Synthesis
- Anthony O'Hare - Exponential Analysis for Net Operational Balance Forecasting
- Garrett Paluck - A new black box GCD algorithm using sparse Hensel lifting

17:00-19:00 room D (SS17)

- Alessandro Neri - The geometry of one-weight linear rank-metric codes
- Valentino Smaldore - Equivalences of rank distance codes
- Luca Bastioni - Characteristic polynomial of linearized polynomials
- Francesco Ghiandoni - Towards the classification of scattered binomials

Friday

9:00-10:30 room A (SS12)

- Máté László Telek - Copositive geometry of Feynman integrals
- Matías Bender - Solving bihomogeneous polynomial systems with a zero-dimensional projection
- Tülay Ayyıldız - A symbolic-numeric method for certified eigenvalue localization

9:00-10:30 room B (SS14)

- Michael Monagan - Factoring Multilinear Boolean Polynomials
- Ferruh Ozbudak - Further results on covering radii of some codes and their connections
- John Sheekey - Invariant Polynomials and Cyclic Line Spreads

9:00-10:30 room C (SS18)

- Kohei Kitamura - A Combinatorial Property of Multiple Polylogarithms at Non-positive Indices
- Van Chien Bui - Various Products of Representative Series and Some Applications
- Quoc Hoan Ngo - Families of Eulerian Functions Involved in Regularization of Divergent Polyzetas

11:00-12:00 room A (SS12)

- Arnaud Minondo - Static bounds for straight-line programs
- Jürgen Gerhard - Multivariate Complex Solver in Maple 2024

11:00-12:00 room B (SS14)

- Lucia Moura - New covering arrays of strength-4 and q symbols from three truncated Möbius planes in P G(3, q), for odd prime power q
- Dimitris Simos - Algebraic and SAT Methods for Classes of Covering Arrays

11:00-12:00 room C (SS18)

- Vu Nguyen Dinh - A Generalization of Magnus Duality
- Nao Komiyama - On Kashiwara-Vergne Lie Algebra and Double Shuffle Lie Algebra in Mould Theory

12:30-13:30 room A (Invited Talk)

- Daniel Panario - Iterating Generalized Cyclotomic Mappings of Finite Fields

15:00-17:00 room C (SS6)

- Rob Corless - On the maximal spread of symmetric Bohemian matrices
- Eunice Chan - Homotopy Methods for Computing Roots of Mandelbrot Polynomials
- Erich Kaltofen - Sparse Interpolation in Chebyshev Basis: Early Termination and Georg Heinig's Toeplitz Solver
- Mark Giesbrecht - From Smith forms to spectra to iterative algorithms for sparse integer matrices

15:00-17:00 room B (SS14)

- Alev Topuzoglu - A new tool for differential analysis of functions in characteristic 2
- Irene Villa - Quadratic-like permutations over F_n^2
- Tekgül Kalaycı - Bent partitions, vectorial dual-bent functions, and association schemes
- Qiang (Steven) Wang - On constructing bent functions from cyclotomic mappings

15:00-17:00 room C (SS4)

- Raffaele Vitolo - A Reduce package for Differential Operators in Mathematical Physics and Theoretical Physics
- Volodymyr Bavula - Affirmative answer to the Question of Leroy and Matczuk on injectivity of endomorphisms of semiprime left Noetherian rings with large images
- Thierry Combot - Symbolic integration on a planar differential foliation