

Monday, June 25

8:00	Registration		
10:30	Opening Ceremony Room A		
11:00	Coffee		
11:30	Clifton Williamson (Proton Digital Systems) Symbolic Computation in the Design of Coding Systems Room A		
12:30	Lunch		
	Computer Algebra in Coding Theory and Cryptography I Room 1	Nonstandard Applications of Computer Algebra I Room 2	Computer Algebra for Dynamical Systems and Celestial Mechanics Room 3
2:00	M. Tolga Sakalli and B. Aslan Algebraic Construction of 16×16 Binary Matrices of Branch Number 7 with One Fixed Point	Emiliya Saranova, Margarita Spiridonova and Stoyan Poryazov Re-dimensioning Task Solutions using Computer Algebra Systems	M. Olle, E. Barrabes and J.M. Mondelo Computation of doubly asymptotic solutions
2:30	Athar Mahboob Speeding up Discrete Logarithm and Elliptic Curve Based Cryptography over $GF(2^m)$ on General Purpose Processors using Lookup Table Based Finite Field Arithmetic Techniques	J. L. Galán, S. Merino, J. Martínez and M. de Aguilera Classifying the items of a Likert based questionnaire in different competences	A.D. Bruno and V.F. Edneral Normal Forms of the Euler-Poisson Equations
3:00	S. Akleylek, F. Özbudak and C. Özel Charlier Polynomial Representation for Finite Fields of Characteristic Three	Antonio Hernando, Roberto Maestre-Martínez and Eugenio Roanes-Lozano An algebraic approach for detecting potential dangerous situations in expert systems through Gröbner bases	A. Mylläri, M. Valtonen, V. Orlov and A. Rubinov The stability criteria for three-body system
3:30	V. Monev An Implementation of Large Number Arithmetic and its Application for Classification of Self-Dual Codes	Francisco Botana and Miguel Á. Abánades A symbolic-numeric environment for computing equidistant curves	T. Combot Non integrability of the colinear 3 and 4 body problem
4:00	Coffee		
4:30	A. Fuster Generation of cryptographic sequences by means of difference equations	Antonio Montes and Tomas Recio Generalizing the Steiner-Lehmus Theorem using the Gröbner Cover	N. Vasiliev Universal Involutive Basis and Robbiano Border Bases
5:00	F. Piva and R. Dahab Using systematic error correcting codes for reversible degradation of multimedia content.	Eugenio Roanes-Lozano Some geometric remarks concerning the overthrow of the different types of railway vehicles when sitting on curved track	N. Vasiliev and A. Terentiev About modeling of Markov processes with asymptotically central measure on three dimensional Young diagrams
5:30	Shutaro Inoue and Y. Sato An extension of the NTRU Cryptosystem	Stephen M. Watt Garbage Collecting the World Wide Web	A. Rosaev The parametric resonance as a source of chaotic behavior in a restricted three body problem
6:00-7:00	Business Meeting Room 1		
8:00-10:00	Welcome Party		

Tuesday, June 26

9:00	Dana Petcu (West University of Timișoara) Benefits and Barriers of Symbolic Computations on Clouds and Grids Room A		
10:00	Coffee		
	Computer Algebra in Coding Theory and Cryptography II Room 1	Nonstandard Applications of Computer Algebra II Room 2	Algebraic and Algorithmic Aspects of Differential and Integral Operators I Room A
10:30	S. Datt Kumar, S. K. Upadhyay and R. Lal Cryptosystem based on platform group of amalgamated free products of braid group	Eduardo Saenz-de-Cabezón and Henry P. Wynn Network Attacks based on Vertex Coverings	Franz Winkler Algebraic Differential Equations - Rational Solutions and Classification
11:00	H. Tapia-Recillas and J.C. Ku-Cauich Bent functions on a Galois ring and Systematic Authentication Codes	G. Aguilera, A. Almiro'n, J. L. Galán, E. Mérida, Y. Padilla and P. Rodríguez An accelerated-time simulation of baggage traffic in an airport terminal	Daniel Robertz Implicitization of Parametrized Families of Analytic Functions
11:30	S. Bulygin TBA	Eugenio Roanes-Lozano, Eduardo A. Casella, Fernando Sanchez and Antonio Hernando A rule based expert system for hitting technique in amateur tennis competition	Xiao-Shan Gao Sparse Differential Resultant for Laurent Differential Polynomials
12:00	P. Seneviratne and J. Limbupasiriporn Permutation decoding for codes from generalized Paley graphs	Yovan Iñiguez del Río, Lourdes Cecilia Fernández-Conde and José Gabriel Zato Recellado An algebraic approach for an efficient and sustainable driving model based on a propositional logic	Chun-Ming Yuan Differential Chow Forms
12:30	Lunch		
	Computer Algebra in Coding Theory and Cryptography III Room 1	Computation Aspects of Constrained Dynamical Systems and Field Theories Room 3	Algebraic and Algorithmic Aspects of Differential and Integral Operators II Room 2
2:00	J. Pujol, M. Villanueva and F. Zeng Minimum Distance of Binary Nonlinear Codes	Plamen P. Fiziev Star Models in Minimal Dilatonic Gravity (MDG)	François Boulier and Nicolas M. Thiéry A Differential Algebra Package in SAGE
2:30	I. Bouyukliev, M. Dzhumalieva-Stoeva and W. Willems Representing Equivalence Problems for Combinatorial Objects	V. S. Gerdjikov Exceptional Lie algebras and spectral properties of the Lax operators with Maple	Sette Diop On a Differential Algebraic Approach of Control Observation Problems
3:00	T. Baicheva and S. Topalova Optimal optical orthogonal codes of weight 5 and small lengths	Vladimir P. Gerdt Singular field theories, Lagrangian constraints and differential Thomas decomposition	Johannes Middeke On the Computation of Pi-flat Outputs for Differential-Delay Systems
3:30	D. E. Simos and Z. Varbanov MDS Codes, NMDS Codes and their Secret-Sharing Schemes	Georgi G. Grahovskit Constructing Integrals of Motion for a Class of Ferromagnetic Type Integrable Equations on A.III-type Symmetric Space	Ruyong Feng On the Structure of Compatible Rational Functions
4:00	Coffee		
4:30	T. Britz On matroid chains	D.M. Mladenov Instant, Light-Front and Point Forms of Dynamics for Spatially Homogeneous Yang-Mills Theory	Ivan Dimovski Operational Calculi for Boundary Value Problems
5:00	N. Yankov Self-dual codes of length 56 with an automorphism of order 5 and self-orthogonal 3-(56, 12, 65) designs	Jukka Tuomela Geometry of configuration space of mechanical systems	Ivan Dimovski and Margarita Spiridonova Extended Heaviside Algorithm for Resonance Mean-Periodic Solutions of Nonlocal Cauchy Problems
5:30	E. Martínez Moro Gröbner presentations of linear and additive codes	Werner M. Seiler Computer-Algebraic Analysis of Physical Field Theories	Yulian Tsankov Exact Solution of Local and Nonlocal BVPs for the Laplace Equation in a Rectangle

Wednesday, June 27

9:00	Tetsu Yamaguchi (Maplesoft) Roles and Expectations of Symbolic Computation in Automotive Development Room A		
10:00	Coffee		
	Computer Algebra in Education I Room A	Interaction between Computer Algebra and Interval Computation Room 3	Algebraic and Algorithmic Aspects of Differential and Integral Operators III Room 2
10:30	Petar Kenderov and Evgenia Sendova Spreading the Inquiry Based Mathematics Education in Bulgaria within the Fibonacci European Project	Walter Kraemer Computing Optimal Boxes Enclosing the Range of Complex Functions	Li Guo Free Integro-Differential Algebras
11:00	A. G. Akritas, I. I. Apostolopoulou and G. S. Floros Computing Sturm sequences with matrix triangularization	Milen Borisov The Maple Package BifTools for Bifurcation Analysis of Dynamical Systems	S. Thota and S. D. Kuma Boundary Problems for Linear Systems of Differential Equations over an Integro-Differential Algebra
11:30	Tsetska Rashkova and Angel Kanchev Usage of the System Mathematica in Teaching and Learning Number Theory	Evgenija D. Popova Explicit description of quasi-symmetric solution set: computer assisted proof of superfluous inequalities	Markus Rosenkranz Localization and the Mikusinski Calculus
12:00			Anja Korporal Composition and Factorization of Generalized Inverses and Boundary Problems
12:30	Lunch		
2:00-7:00	Excursion		
8:00-10:00	Dinner		

Thursday, June 28

9:00	Viktor Levandovskyy (RWTH Aachen University) Trends in Computer Algebraic Analysis Room A		
10:00	Coffee		
	Computer Algebra in Education II Room A	Parallel Computer Algebra Applications I Room 1	Algebraic and Algorithmic Aspects of Differential and Integral Operators IV Room 2
10:30	Elena Shoikova and Elena Varbanova About the Potential of CAS and LMS for Enhancement of Mathematics Education	Michael Monagan and Roman Pearce POLY: A new polynomial data structure for Maple 17	Alban Quadrat and Daniel Robertz Module Structure of Rings of Partial Differential Operators
11:00	Mladen Manev Students' Competition of Computer Mathematics CompMath	Stephen Watt Parallel computing in mathematical character recognition.	Yongjae Cha Homomorphism Between two Difference Operators
11:30	M.M. Konstantinov and V. V. Pasheva CAS in Mathematical Education for Engineers	Ilias Kotsireas Challenging combinatorial problems emanating from autocorrelation.	Alexandre Benoit Quasi-Optimal Multiplication of Linear Differential Operators
12:00	E. Roanes-Lozano and E. Roanes-Macias Some elementary examples on the need for radical membership checking in mechanical theorem proving in geometry	Shutaro Inoue and Yosuke Sato. On parallel computations of Boolean Gröbner bases for combinatorial problems.	Alin Bostan Fast Computation of Common Left Multiples of Linear Ordinary Differential Operators
12:30	Lunch		
	Computer Algebra in Education III Room A	Parallel Computer Algebra Applications II Room 1	Algebraic and Algorithmic Aspects of Differential and Integral Operators V Room 2
2:00	Samet Karaibryamov, Bistra Tsareva and Boyan Zlatanov Sam: Dynamic Geometric Software to Optimize the Learning of Geometry and to Activate an Inventive Style of Thinking	I.A. Borisov About one matrix approach to parallel constructing of Gröbner bases	Vladimir Gerdt Computer Algebra Application to Numerical Solving of Nonlinear KdV-type Equations
2:30	Michael Monagan Teaching Commutative Algebra and Algebraic Geometry using Computer Algebra Systems	G.I. Malaschonok On fast generalized Bruhat decomposition in a domain.	Serguey V. Zemskov On Finding a Complete Integral of Second-Order Hyperbolic PDEs with Constant Coefficients in Infinite Space
3:00	Maria G. Karatopraklieva Computer Proofs of Identities Using CAS	M.A. Rybakov Parallel computation of general solutions of systems of ordinary differential equations with constant coefficients	Christoph Koutschan Twisting q -holonomic Sequences by Complex Roots of Unity
3:30	Coffee		
4:00	Spyros Kehagias and Alkiviadis G. Akritas Implementation of VAS in iOS	N.A. Malaschonok Parallel solving systems of linear differential equations with impulse coefficients using Laplace transform	Thierry Combet Algorithms for Non Integrability Proofs
4:30		A.A. Betin A parallel algorithm for modular calculation of an adjoint matrix in the polynomial ring	Guillaume Cheze An Efficient Algorithm for Computing Rational First Integrals of Polynomial Vector Fields
5:00	Closing Room A		