CASC 2022 **Schedule** **Gebze Technical University**

	Monday	Tuesday	Wednesday	Thursday	Friday
10:00:00 AM		10	20	30	33
10:30:00 AM		11	21	31	34
11:00:00 AM	Coffee break	12	22	32	35
11:30:00 AM	Opening	Coffee break			
12:00:00 PM	1	Invited Talk 1	23	Invited Talk 2	36
12:30:00 PM	2		24		37
01:00:00 PM	Lunch break				
01:30:00 PM					
02:00:00 PM					
02:30:00 PM	3	13	25	Excursion	38
03:00:00 PM	4	14	26		39
03:30:00 PM	5	15	27		40
04:00:00 PM	Coffee break				Closing
04:30:00 PM	6	16	28		
05:00:00 PM	7	17	29		
05:30:00 PM	8	18	Business Meeting		
06:00:00 PM	9	19			

Talk #	Authors	Title
Invited Talk 1:	Marc Moreno Maza	Implementation Techniques for Power, Laurent, and Puiseux Series in Several Variables
Invited Talk 2:	Michael Vrahatis	Generalizations of the Intermediate Value Theorem and Applications
1	Franz Brauße, Pieter Collins and Martin Ziegler	Computer Science for Continuous Data: Vision, Theory, and Practice of a Computer (Algebra) ANALYSIS System
2	Daisuke Takahashi	An Implementation of Parallel Number-Theoretic Transform Using Intel AVX-512 Instructions
3	Ayoola Jinadu and Michael Monagan	An Interpolation Algorithm for computing Dixon Resultants
4	David J. Jeffrey, Mohammadali Asadi, Marc Moreno Maza and Alexander Brandt	Subresultant chains using Bezout matrices
5	Rémi Imbach and Victor Y. Pan	Accelerated Subdivision for Clustering Roots of Polynomials given by Evaluation Oracles
6	Irtegov Valentin and Tatiana Titorenko	On Equilibrium Positions in the Problem of the Motion of a System of Two Bodies in a Constant Gravity Field
7	Algirdas Deveikis, Alexander Gusev,	Symbolic-Numeric Algorithm for Calculations in
8	Alexander Prokopenya	Stability Analysis of Periodic Motion of the Swinging Atwood Machine
9	Andrei Banshchikov	Application of symbolic-numerical modeling tools for analysis of gyroscopic stabilization of equilibriums of gyrostat
10	Alexander Demin, Hamid Rahkooy and	F5: A REDUCE Package for Signature-based Gröbner
11	Mariya Bessonov, Ilia Ilmer, Tatiana Konstantinova, Alexey Ovchinnikov, Gleb Pogudin and Pedro Soto	Accelerating Gröbner Basis Computation via Weighted Ordering in Parameter Identifiability of ODE Models
12	Kosuke Sakata, Momonari Kudo, Taku Kato and Kazuhiro Yokoyama	Implementation report on computing Gröbner bases over exterior algebra
13	Sergei Abramov, Denis Khmelnov and Anna Ryabenko	On exponential-logarithmic solutions of truncated LODEs
14	Hara Charalambous, Kostas Karagiannis, Sotiris Karanikolopoulos and Aristides Kontogeorgis	Computational aspects of equivariant Hilbert series of canonical rings
15	Markus Lange-Hegermann and Daniel Robertz	On boundary conditions parametrized by analytic functions
16	Tasuku Nakagawa, Momonari Kudo and Tsuyoshi Takagi	Efficient search for superspecial hyperelliptic curves of genus 4 in large characteristic
17	Jaime Gutierrez	A SageMath program for recovering points of superelliptic curves over a prime finite field
18	Muhammad Qureshi	Computing models of orbifold del Pezzo surfaces in P1 x P1 x P1 format
19	Hiroki Furue and Momonari Kudo	On the computational enumeration of superspecial curves: A survey and complements

Talk #	Authors	Title
20	Victor Edneral	Integrable Cases of the Polynomial Kind of the Lienard-type Equation
21	Sergey Gutnik and Vasily Sarychev	Investigation of the Dynamics of Two Connected Bodies in the Plane of a Circular Orbit Using Computer Algebra Methods
22	Alexandru Iosif and Hamid Rahkooy	Experiments on the Conradi-Kahle Algorithm for Detecting Binomiality for Biological Models
23	Evgenii Vorozhtsov and Sergey Kiselev	A General Method of Finding New Symplectic Schemes for Hamiltonian Mechanics
24	Jan Verschelde and Kylash Viswanathan	Locating the Closest Singularity in a Polynomial Homotopy
25	Mingyu Dong and Chenqi Mou	Analyses and Implementations of Chordality-Preserving Top-Down Algorithms for Triangular Decomposition
26	Philipp Nuspl and Veronika Pillwein	A comparison of algorithms for proving positivity of linearly recurrent sequences
27	Tereso del Río and Matthew England	New heuristic to choose a cylindrical algebraic decomposition variable ordering motivated by complexity analysis
28	Chiang-Heng Chien, Hongyi Fan, Elias Tsigaridas, Ahmad Abdelfattah, Stanimire Tomov and Benjamin Kimia	Parallel Path Tracking for Homotopy Continuation using GPU
29	Alexander Gusev, Galmandakh Chuluunbaatar, Ochbadrakh Chuluunbaatar and Sergue Vinitsky	Hermite Interpolation Polynomials on Parallelepipeds
30	Vitaly Krasikov	On computational aspects of the polynomial amoebas (Review)
31	Boming Chi and Akira Terui	The GPGCD Algorithm with the Bezout Matrix for Multiple Univariate Polynomials
32	Tian Chen and Michael Monagan	Factoring Non-monic Polynomials Represented by Black Boxes
33	Zhenbing Zeng, Yaochen Xu, Yu Chen and Zhengfeng Yang	A symbolic algorithm for isolating locally optimal points of certain radical functions
34	Elizabeth Kalinina and Alexei Uteshev	Distance Evaluation to the Set of Matrices with Multiple Eigenvalues
35	Linxiao Wang and Marc Moreno Maza	Computing the Integer Hull of Convex Polyhedral Sets

Talk #	Authors	Title
36	Timur Sadykov	A Mathematica Package for Construction and Inversion of Analytic Mappings with Unit Jacobian
37	Kosaku Nagasaka and Ryo Oshimatani	Groebner basis detection with parameters
38	Jiayue Qi	A calculus for monomials in Chow group of zero cycles in the moduli space of stable curves
39	Fadime Baldemir and Mesut Sahin	Calculating the Minimum Distance of a Toric Code via an Algebraic Algorithm
40	Amir Hashemi, Matthias Orth and Werner M. Seiler	Infinite Free Resolutions Induced by Pommaret-like Bases