

CASC 2019 Schedule. Venue: Zatsepa 41, Moscow, Russia

	Monday August 26	Tuesday August 27	Wednesday August 28	Thursday August 29	Friday August 30
08h00-09h00	Registration and Opening				
09h00-09h30	Greg Reid, Zahra Mohammadi, S.-L. Tracy Huang Extension of the MapDE algorithm for mappings	Chee Yap Towards soft exact computation	Victor Y. Pan Old and new nearly optimal polynomial root-finders	Stanislav Poslavsky An efficient JVM library for commutative algebra	Semjon Adlaj An arithmetic-geometric mean of a third kind!
09h35-10h05	Alexander Batkhin Bifurcations of doubly symmetric periodic solutions to Hamiltonian system with 2 degrees of freedom		Elizabeth Kalinina, Yuri Smol'kin, Alexei Uteshev Robust schur stability of a polynomial matrix family		Vladimir Korniyak An algorithm for computing invariant projectors in representations of wreath products
10h05-10h30	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10h30-11h00	François Boulier, François Lemaire, Adrien Poteaux, Marc Moreno Maza A short contribution to the theory of regular chains	Vladimir Gerdt, Yuri Blinkov, Ilya Pankratov, Ekaterina Kotkova Construction of a new implicit difference scheme for 2D Boussinesq paradigm equation	Vitaly Zaderman, Liang Zhao Counting roots of a polynomial in a convex compact region by means of winding number calculation via sampling	Rina Dong, Chenqi Mou On characteristic decomposition and quasi-characteristic decomposition	Amir Hashemi, Mahsa Kazemi Parametric standard bases and their applications
11h05-11h35	Youren Hu, Xiao-Shan Gao Tropical differential groebner basis	Christoph Lüders, Hassan Errami, Satya S. Samal, Matthias Neidhardt, Andreas Weber ODEbase: an extensible database providing algebraic properties of dynamical systems	Qiao-Long Huang, Xiao-Shan Gao Revisit sparse polynomial interpolation based on randomized Kronecker substitution	Clemens G. Raab, Georg Regensburger, Jamal Hossein Poor Interpreting algebraic proofs of operator identities	Harald Hofstätter, Winfried Auzinger, Othmar Koch An algorithm for computing coefficients of words in expressions involving exponentials and its application to the construction of exponential integrators
11h40-12h10	Shinichi Tajima, Katsusuke Nabeshima An algorithm for computing torsion differential forms associated to an isolated hypersurface singularity	Mikhail Malykh, Edik Aryan, Leonid Sevastianov, Yu Ying On explicit difference schemes for autonomous systems of differential equations on manifolds	Remi Imbach, Victor Y. Pan, Chee Yap, Ilias Kotsireas, Vitaly Zaderman Root-finding with implicit deflation	Nikolay Osipov, Sergey Dalinkevich An algorithm for solving a quartic diophantine equation satisfying Runge's condition	Zhenbing Zeng, Liangyu Chen Determining the Heilbronn configuration of seven points in triangles via symbolic computation
12h10-14h00	Lunch	Lunch	Lunch	Lunch	Lunch
14h00-14h30	Chenqi Mou, Xiaolin Fan On Berlekamp–Massey and Berlekamp–Massey–Sakata algorithms	Jose Cano, Sebastian Falkensteiner, Rafael Sendra Formal Puiseux series solutions of first order autonomous algebraic ordinary differential equations	Excursion and Social Dinner	Sergey Gutnik, Vasily Sarychev Symbolic investigation of the dynamics of a system of two connected bodies moving along a circular orbit	Ilias Kotsireas, Youtong Liu, Jing Yang PAF reconstruction with the orbits method
14h35-15h05	Katsusuke Nabeshima, Shinichi Tajima Testing zero-dimensionality of varieties at a point	Werner M. Seiler, Matthias Seiss, Thomas Sturm A logic based approach to finding real singularities of implicit ordinary differential equations		Jose Capco, Saraleen Mae Manongsong Implementing hupf algorithm for the inverse kinematics of general 6R/P manipulators	Dima Grigoriev, Thomas Sturm, Andreas Weber The complexity of recognizing toricity of a variety
15h10-15h40	Anastasiia Tiutiunnik, Dmitriy Divakov, Mikhail Malykh, Leonid Sevastianov Symbolic-numeric implementation of the four potential method for calculating normal modes: an example of square electromagnetic waveguide with rectangular insert	Vitaliy Krasikov Analytic complexity of hypergeometric functions satisfying systems with holonomic rank two		Evgenii Vorozhtsov, Vasily Shapeev A divergence-free method for solving the incompressible Navier-Stokes equations on non-uniform grids and its symbolic-numeric implementation	Sergey Bruskin, Nikolay Golov, Alexander Filatov Algorithm for exact calculation of millions hierarchical count distinct measures
15h45-16h15	Andrei Banschikov Obtaining and analysis of the necessary conditions of stability of orbital gyrostap by means of computer algebra	Algirdas Deveikis, Alexander Gusev, Vladimir Gerdt, Sergue Vinitsky, Andrzej Gozdz, Aleksandra Pedrak, Cestmir Burdik Symbolic-numerical algorithm for large scale calculation of the orthonormal SU(3) BM basis		Valentin Irtegov, Tatiana Titorenko On linear invariant manifolds in the generalized problem of motion of a top in a magnetic field	Changbo Chen, Wenyan Wu A numerical and geometrical method for solving parametric biological networks by exploiting block triangular structure: case studies
16h15-16h40	Coffee Break	Coffee Break			Coffee Break
16h40-17h10	Dmitriy Divakov, Anton Sevastianov The implementation of the symbolic-numerical method for finding the adiabatic waveguide modes of integrated optical waveguides in CAS Maple	Raffaele Vitolo CDE: calculus on differential equations - a Reduce package	Amir Hashemi, Hossein Parnian, Werner M. Seiler Degree upper bounds for involutive bases	Alexey Kasatkin, Aliya Gainetdinova Symbolic and numerical methods for searching symmetries of ordinary differential equations with a small parameter and reducing its order	
17h15-17h45		Chee Yap, Rémi Imbach, Marc Pouget Clustering complex zeros of triangular system of polynomials		Business Meeting	