The International Conference ***Polynomial Computer Algebra***
April 18-22, Saint-Petersburg, Russia
Euler International Mathematical Institute

April 18

10.00—11.00 ***Registration, coffee***
11.00—11.10 ***Opening the conference***

11.10—12.00 ***Vladimir P. Gerdt and Yury A. Blinkov*** Computationally efficient involutive divisions
12.00—12.30 ***Victor F. Edneral and Valery G. Romanovski*** On the structure of normal forms of p : -q resonant polynomial vector fields
12.30—13.00 ***Natasha Malaschonok*** Analytic solving of partial differential equations systems and compatibility conditions

13.00—15.00 ***Lunch***

15.00—15.30 ***Pavel V. Fokin, Yury A. Blinkov*** ZDD diagrams as appropriate data structuresin construction of Boolean Gröbner bases by involutive algorithms ¤
15.30—16.00 ***Alexei Zobnin*** Kolchin differential ideals generated by a first-order polynomial

16.00—16.30 Coffee break

16.30—17.00 ***Denis A. Yanovich*** Evaluation of parallel computation of Gröbner and Janet bases using MPI
16.00—17.30 ***Timur R. Seifullin*** Division-free computation of the determinant and characteristic polynomial
17.30—18.00 ***Oxana Pereslavtseva*** Parallel algorithm for computing characteristic polynomials of polynomial matrices and experiments

18.30 ***WELCOME PARTY***

April 19

10.00—10.55 ***Dima Grigoriev*** Newton-Puiseux series for non-holonomic D-modules and factoring

11.00—11.20 ***Coffee break***

11.20—12.15 ***Anton Leykin*** Numerical algebraic geometry
12.20—13.00 ***Pasha Zusmanovich*** Non-koszulity of the alternative operad and inversion of polynomials

13.00—15.00 ***Lunch***

15.00—15.40 ***Takayuki Oda*** 0-cycles in the fundamental domain of the Siegel modular group of genus two
15.40—16.20 ***Nikolai Proskurin*** On distribution of real parts of cubic L-function

16.20—16.40 Coffee break

16.40—17.10 ***Nikolay Vasiliev*** Dickson type finitness theorems for order ideals of Dicksonian posets
17.10—17.40 ***Josephine Yu*** An Implicitization challenge
17.40—18.10 ***Yury Palii*** The Basis of the entanglement local invariant ring

April 20

10.00—11.00 ***Alexander D. Bruno*** Asymptotic solution of an algebraic equation

11.00—11.20 ***Coffee break***

11.20—12.10 ***Alexander B.Batkhin*** Computation of asymptotic solution of an algebraic equation
12.10—12.40 ***K. Kholshevnikov, A. Mylläry, D. Tolumbaeva and D. Vavilov*** On determining preliminary orbits of extrasolar planets using the radial velocity curve
12.40—13.10 ***Hassan Errami, Thomas Sturm, and Andreas Weber*** Algorithmic aspects of muldowney's extension of the Bendixson-Dulac criterion for polynomial vector fields

Lunch

15.00—15.50 ***Vladimir V. Kornyak*** Application of Finite Groups to Quantum Physics
15.50—16.20 ***Mikhail Rybalkin*** Permutation trinomials over finite fields

16.20—16.50 ***Coffee break***

16.50—17.20 ***Rashit Faizulin*** Data code algorithm based on steganography approach
17.20—17.40 ***Olga Kanzheleva*** Polynomial interpolation over finite rings
17.40—18.10 ***Olga Efimovskaya and Thomas Wolf*** Integrable non-abelian Laurent ODE

April 21

9.30—10.10 ***Boris Kazarnovskii*** Monge-Amper operator and tropical geometry
10.10—10.40 ***Boris Kazarnovskii and Askold Khovansky*** Universal Groebner Basis

Excursion to the Gatchina Palace

The bus will start from the Euler Institute at 11:00

19.00— Banquet

April 22

10.00—10.50 ***Alexander L. Chistov*** Effective Version of the First Bertini Theorem in Nonzero Characteristic and its Applications

10.50—11.10 ***Coffee break***

11.10—12.00 ***Nikolai Vavilov and Alexander Luzgarev*** Polynomial invariants of exceptional groups
12.00—12.30 ***Gennadi Malaschonok*** Can we compute Bruhat decomposition in a domain with the complexity of matrix multiplication
12.30—13.00 ***Sergey Baranov, Bertrand Boisvert, Louis F´eraud and Sergei Soloviev*** Typed lambda terms in categorical graph rewriting

13.00—15.00 ***Lunch***

15.00—15.30 ***Konstantin Usevich*** Polynomial-exponential 2D data models, Hankel-block-Hankel matrices and zero-dimensional ideals
15.30—16.00 ***Dmitry Pavlov*** Finding the statistical fan of an experimental design
16.00—16. 30 ***Ioannis N. Parasidis and E. Providas*** Quadratic and biquadratic operators and its applications for correct and self-adjoint problems
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Closing the Conference, coffee