

April 23-28, Saint-Petersburg, Russia

Euler International Mathematical Institute

April 23

- 10.00—11.00 **Registration, coffee**
11.00—11.10 **Opening the conference**
- 11.10—11.50 **Nikolai Proskurin** On the zeros of L-functions admitting no Euler products
11.50—12.20 **Evgeny Ulanov, Alexei Uteshev** On two classical distance optimization problems
12.20—13.00 **Tadashi Takahashi** On the Restrictions of Smooth Quartics
13.00—15.00 **Lunch**
- 15.00—15.30 **Nikolai Krivulin** Extremal Problems in Tropical Mathematics: Solution Methods and Application to Location Analysis
15.30—16.00 **Mikhail Rybalkin** *Permutation polynomials*
16.00—16.30 **Coffee break**
- 16.30—17.00 **Ivan Borisov** On some matrix approach to constructing Gröbner bases
17.00—17.30 **Mikhail Rybakov** Computing general solutions of systems of ordinary differential equations with constant coefficients
17.30—18.00 **Natasha Malashonok** The Laplace method for linear differential equations with impulse coefficients
18.00—18.20 **Roman Smirnov** One approach to symbolic solution of partial differential equations
- 18.30 **WELCOME PARTY**

April 24

- 10.00—10.50 **Stefan Steidl** Gröbner Bases of Symmetric Ideals
- 11.00—11.20 **Coffee break**
- 11.20—12.10 **Vladimir Gerdt, Yuri Blinkov** *Computer algebra application to numerical solving of nonlinear KdV-type equations*

12.15—13.00 **Pavel Fokin, Yury Blinkov** Combined ZDDs

13.00—15.00 **Lunch**

15.00—15.40 **Ilias Kotsireas** Periodic and non-periodic autocorrelation

15.40—16.20 **Timur Seifullin** Extension of bounded root functionals of one polynomial in one variable

16.20—16.40 **Coffee break**

16.40—17.20 **Gennadi Malaschonok** About Bruhat decomposition in domain

17.20—18.00 **J. Boudou, Sergei Soloviev** Verification using Ocaml of Commutativity of Diagrams in Free Symmetric Monoidal Closed Categories

April 25

10.00—10.50 **Victor Petrov** Schubert calculus via equivariant cohomology

11.00—11.20 **Coffee break**

11.20—12.10 **Maxim Vsemirnov** Recent results on (2,3)-generated and Hurwitz groups

12.10—13.00 **Andrey Malyutin** Normal forms in braid groups

13.00—15.00 **Lunch**

15.00—15.40 **Yuri Palii** A method for construction of Lie group invariants

15.40—16.10 **Alexei Mishchenko, Alexander Treyer** The algorithmic complexity of the problem of universal equivalence for partially commutative nilpotent groups

16.10—16.30 **Coffee break**

16.30—17.10 **Dmitry Ashkadov, Nikolay Vasilyev** On evaluations of spectrum and matrix elements of Coxeter-Laplace operators in vector spaces generated by Young tableaux

17.10—18.00 **Vladimir Kornyak** Finite Fiber Bundles and Quantum Mechanics

April 26

10.00—10.50 **Eugene Zima** Alternative algorithms for accelerated indefinite summation

10.50—11.10 **Coffee break**

Excursion

Excursion to Lomonosov (Oranienbaum) with a drive by Kronshtadt

The bus will start from the Euler Institute at 11:15

19.00— Conference dinner

April 27

10.00—10.50 ***Alexander Chistov*** An analog of the discriminant for the property of absolute irreducibility of polynomials

10.50—11.10 ***Coffee break***

11.10—11.40 ***Georgi Khimshiashvili*** On generalized Heron polynomials

11.40—12.05 ***Anatoly Yakovlev*** A generalization of Gröbner bases.

12.05- 12. 30 ***Anastasia Blinkova, Irina Kovaleva*** The Application of Gröbner bases to the construction of solutions to some nonlinear wave hydroelasticity problems

12.30—13.00 ***Andrey Betin*** Parallel modular algorithm for computing an adjoint matrix in the ring of polynomials of several variables

13.00—15.00 ***Lunch***

15.00—15.30 ***Nikolay Kosovski*** Turbo or Visual Prolog Polynomial-Time Query for List Processing as Polynomial-Time Turing Machines

15.30—16.00 ***Matvej Kotov*** On the Zariski topology on some algebras admitting quantifier elimination

16.00—16. 40 ***Lyosha Beshenov*** On Semialgebraic Sets Defined Over Quadratic Maps

16.40—17.00 ***Coffee break***

17.00—17.20 ***Oxana Pereslavytseva*** Parallel algorithm for computing the characteristic polynomials of polynomial matrices

17.20—17.50 ***Gennadi Malaschonok and Evgeni Ilchenko*** Decentralized control of parallel computing