

## April 16

- 09:30 — 10:20 Registration, coffee  
10:20 — 10:30 Opening the conference
- 10:30 — 11:10 ***Vladimir Gerdt, Markus Lange-Hegermann, Daniel Robertz***  
Thomas decomposition of differential systems and its implementation in Maple
- 11:10 — 11:40 ***Vladimir Korniyak***  
Irreducible Decomposition of Representations of Finite Groups via Polynomial Computer Algebra
- 11:40 — 12:00 ***Coffee break***
- 12:00 — 12:30 ***Vahagn Abgaryan, Arsen Khvedelidze, Astghik Torosyan***  
On a moduli space of the Wigner quasiprobability distributions
- 12:30 — 13:00 ***Nikolai Proskurin***  
On character sums and complex functions over finite fields
- 13:00 — 15:00 Lunch
- 15:00 — 15:30 ***Evgenii Mityushov, Natalia Misyura, Svetlana Berestova***  
On finite subgroups of  $SO(3)$ , regular polyhedrons in  $R^4$  and the spherical motion of rigid body
- 15:30 — 16:00 ***Alexandr Seliverstov*** Real cubic hypersurfaces containing no line of singular points
- 16:00 — 16:30 ***Coffee break***
- 16:30 — 17:00 ***Mikhail Babich, Sergey Slavyanov***  
Links between second-order Fuchsian equations and first-order linear systems
- 17:00 — 17:30 ***Aleksandr Salatich, Sergey Slavyanov***  
Confluent Heun Equation and equivalent first-order systems
- 17:30 — 18:00 ***Maksim Karev***  
Double Hurwitz Numbers

18:30 ***WELCOME PARTY***

## April 17

- 10:00 — 10:50 ***Lorenzo Robbiano***  
Computational Linear and Commutative Algebra
- 10:50 — 11:20 ***Coffee break***
- 11:20 — 12:10 ***Chenqi Mou***  
On the chordality of polynomial sets in triangular decomposition in top-down style
- 12:10 — 13:00 ***Dima Grigoriev, Nicolai Vorobjov***  
Upper bounds on Betti numbers of tropical prevarieties
- 13:00 — 15:00 ***Lunch***
- 15:00 — 15:20 ***Sergei Soloviev, Mark Spivakovsky, Nikolay Vassiliev, Dima Grigoriev***  
To the memory of Sergei Baranov
- 15:20 — 16:10 ***Anatoly Vershik***  
To make simulation on algorithm RSK for Bernoulli sequences
- 16:10 — 16:40 ***Coffee break***
- 16:40 — 17:10 ***Mikhail Malykh, Leonid Sevastianov, Yu Ying***  
Elliptic functions and finite difference method
- 17:10 — 17:40 ***Andrei Malyutin***  
What does a random knot look like?
- 17:40 — 18:10 ***Dominik Michels, Vladimir Gerdt, Dmitry Lyakhov, Yuri Blinkov***  
On Strongly Consistent Finite Difference Approximations

## April 18

- 10:00 — 10:50 ***Michela Ceria, Teo Mora***  
Combinatorics of ideals of points: a Cerlienco-Mureddu- like approach for an iterative lex game
- 10:50 — 11:20 ***Alexander Chistov***  
A New Approach to Effective Computation of the Dimension of an Algebraic Variety
- 11:20 — 11:50 ***Coffee break***
- 11:50 — 12:30 ***Martin Kreuzer, Le Ngoc Long, Lorenzo Robbiano***  
On the Cayley-Bacharach Property
- 12:30 — 13:00 ***Ronen Peretz***  
A sharp version of Shimizu's theorem on entire automorphic functions
- 13:00 — 15:00 ***Lunch***
- 15:00 — 15:30 ***Alexander Batkhin***  
q-Analogue of discriminant set and its computation
- 15:30 — 16:00 ***Aleksandr Mylläri, Tatiana Mylläri, Anna Myullyari, Nikolay Vassiliev***  
On the complexity of trajectories in the equal-mass free-fall three-body problem
- 16:00 — 16:30 ***Alexander Tiskin***  
Weighted seaweed braids
- 16:30 — 17:00 ***Coffee break***
- 17:00 — 17:30 ***Darya Chemkaeva, Alexander Flegontov***  
Bifurcation diagrams for polynomial nonlinear ODE
- 17:30 — 18:00 ***Ioannis Parasidis, Efthimios Providas***  
Factorization Method for the Second-Order Linear Nonlocal Difference Equations
- 18:30 ***Chamber music concert. Euler Institute***

## April 19

- 10:00 — 10:40 **Mark Spivakovsky**  
On the Pierce-Birkhoff conjecture and related problems
- 10:40 — 11:20 **David R. Stoutemyer, David J. Jeffrey, Robert M. Corless**  
Integration and the specialization problem
- 11:20 — 11:50 **Coffee break**
- 11:50 — 12:30 **Nikolai Vavilov**  
Reverse decomposition of unipotents
- 12:30 — 14:00 **Lunch**

Bus Excursion around St. Petersburg and visit to St. Isaac's Cathedral.  
The bus will start from the Andersen hotel at 14:00

19:00 **Banquet**

## April 20

- 10:00 — 10:40 **Fedor Petrov**  
Arithmetic progressions in 2-groups
- 10:40 — 11:10 **Vasilii Duzhin, Nikolay Vassiliev**  
Schutzenberger transformation on graded graphs: Implementation and numerical experiments
- 11:10 — 11:40 **Coffee break**
- 11:40 — 12:10 **Anton Chukhnov, Ilya Posov, Sergei Pozdniakov**  
Computer assisted constructive tasks as tasks with infinite set of solutions for math olympiads and contests
- 12:10 — 12:40 **Victor Edneral, Valery Romanovski**  
Local and Global Integrability of ODEs
- 12:40 — 14:30 **Lunch**
- 14:30 — 15:00 **Semjon Adlaj**  
Back to solving the quintic, depression and Galois primes
- 15:00 — 15:30 **Dmitry Pavlov**  
Usage of Automatic Differentiation in Some Practical Problems of Celestial Mechanics
- 15:30 — 16:00 **Dan Aksim, Dmitry Pavlov**  
On the Extension of Adams–Bashforth–Moulton Methods for Numerical Integration of Delay Differential Equations and Application to the Moon's Orbit
- 16:00 — 17:00 **Free round table discussion, Closing of the Conference, coffee**