

Program

The PDF file with the program is [here](#)

You can download the book of abstracts from [pca2024_book.pdf](#)

Please contact to the organizers if you see some mistakes and/or collisions with your own schedule.

April 15

10:00 — 10:30	Registration, coffee
	Euler Institute, Pesochnaya nab. 10 The link to the Zoom channel of PCA is in your personal account
10:30 — 11:00	Vladimir Kornyak (Joint Institute for Nuclear Research, Meshcheryakov Laboratory of Information Technologies) Finite groups and quantum mechanics: evolution and decomposition of quantum systems
11:00 — 11:30	Yuri Blinkov (Saratov State University) Compact first-order differential approximations: a case study of the Korteweg-de Vries equation
11:30 — 12:00	Coffee break
12:00 — 12:30	Alexander Batkhin , Alexander Petrov (Technion - Israel Institute of Technology) On parametrization of orthogonal symplectic matrices and its applications
12:30 — 13:00	Nikolai Proskurin (St. Petersburg Department of Steklov Institute of Mathematics) On pictures related to some exponential sums
13:00 — 15:00	Lunch in the Hotel Kamennooostrovskaya
15:00 — 15:30	Vladimir Titov (Saint-Petersburg State University) Periodic orbits in the shape space
15:30 — 16:00	Alexander Bruno , Alijon Azimov (Samarkand State University named after Sh. Rashidov) Asymptotic expansions of a manifold near its curve of singular points
16:00 — 16:30	Coffee break
16:35 — 17:05	Boris Kazarnovskii (Institute for Information Transmission Problems) The zeros of random sections of real vector bundles

17:10 — 17:40	Alexander Chistov (St. Petersburg Department of Steklov Mathematical Institute of the Academy of Sciences of Russia) Estimates for roots of a polynomial in the field of multiple formal fractional power series in zero characteristic
17:40 — 18:20	Elina Shishkina , Oleg Marichev (Voronezh State University, Wolfram Research Inc.) The H-Transform in Wolfram Mathematica and Its Particular Cases
	Welcome party

April 16

	Euler Institute, Pesochnaya nab. 10 The link to the Zoom channel of PCA is in your personal account
10:00 — 10:30	Victor Selivanov (Saint Petersburg university) Remarks on Tarski's elimination
10:30 — 11:00	Alexandr Seliverstov (Institute for Information Transmission Problems of the Russian Academy of Sciences) On the Length of an Unsatisfiable Conjunction
11:00 — 11:30	Mikhail Babich , Ljudmila Bordag, Arsen Khvedelidze, Dmitar Mladenov (St. Petersburg Department of Steklov Mathematical Institute) On multidimensional analogs of the Euler angles and Grassmanians.
11:30 — 12:00	Coffee break
12:00 — 13:00	Alexander Bruno (Keldysh Institute of Applied Mathematics of RAS) Analytic solving any equation of polynomial type on variables and derivatives
13:00 — 15:00	Lunch in the Hotel Kamennooostrovskaya
15:00 — 15:30	Boris Zolotov , Alexander Tiskin, Nikita Gaevoy (St. Petersburg State University; Euler International Mathematical Institute) Doubly-periodic string comparison
15:30 — 16:00	Vladislav Shubin , Nikita Gogin (university of Stokholm) Binomial Coefficients as Functions of their Denominator; Another Primality Criteria for Natural Integers
16:00 — 16:30	Coffee break
16:30 — 17:00	Egor Smirnov-Maltsev , Vasilii Duzhin, (Saint Petersburg Electrotechnical University "LETI")

Some geometric properties of shifted Young diagrams of maximum dimensions

17:00 — 17:30

Alexander Sakharov (Synstretch)
Partially Ordered Derivations in Sequent Calculi for Nonstandard Logics

April 17

Joint session of the PCA2023 and
[Seminar on Representation Theory and Dynamical Systems](#)
The link for Zoom of PCA is in your [personal account](#)

10:00 — 10:30

Sergey Gutnik (Moscow State Institute of International Relations (MGIMO University))
Investigation of the Periodic Planar Oscillations of a Two-Body System in an Elliptic Orbit Using the Polynomial Algebra Methods

10:30 — 11:00

Victor Edneral (Lomonosov Moscow State University)
On the integrability of two- and three-dimensional dynamical systems with a quadratic right-hand side in cases of resonances in linear parts and in cases of general position.

11:00 — 11:30

Coffee break

11:30 — 12:00

Mikhail Malykh (Patrice Lumumba Peoples' Friendship University of Russia)
On computer experiments with reversible difference schemes in Sage

12:00 — 12:20

Sergei Pozdniakov (Saint-Petersburg Electrotechnical University)
Algorithmic mathematics in a technical university: different ways to comprehend the material

12:20 — 13:00

Semjon Adlaj (Dorodnicyn Computing Center of the Russian Academy of Sciences)
The Euler top and the Lagrange top as two special cases of the Galois top

13:00 — 15:00

Lunch in the [Hotel Kamennostrovskaya](#)

15:00 — 15:30

Gleb Nenashev (St. Petersburg State University)
Murnaghan–Nakayama rule for complete flag variety

15:30 — 16:00

Martin Bures (Joint Institute for Nuclear Research)
Quantum algorithms for particle track reconstruction

16:00 — 16:20

Sergey Khryashchev (St. Petersburg State Electrotechnical University)
On Multicomponent Continued Fraction Expansions of Hypernumbers of Certain Classes

16:20 — 16:45	Coffee break
16:45 — 17:15	Wang Shiwei , Mikhail Malykh, Yu Ying (Peoples' Friendship University of Russia) A set of tools developed based on the Calogero system for testing numerical methods for solving many-body problems
17:15 — 17:35	Fedor Petrov (St Petersburg University, St Petersburg Department of Steklov Institute RAS) Polynomial method for point configurations
17:35 — 18:05	Andrei Malyutin (St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences) The rotation number integer quantization effect in groups acting on the circle

April 18

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10:00 — 10:55	Senya Shlosman (Skotech) Pedestals: Polynomial matrices with polynomial eigenvalues.
11:00 — 11:30	Alexander Bruno , Alexander Batkhin (Keldysh Institute of Applied Mathematics of RAS) New cases of integrability of the Euler-Poisson system
11:30 — 11:50	Coffee break
11:50 — 12:20	Farid Mikhailov (Saint Petersburg Electrotechnical University "LETI") Computing of tropical sequences associated with Somos sequences in Gfan package
12:20 — 12:50	Nikolai Krivulin (Saint Petersburg State University) Solution of Tropical Best Approximation Problems
15:00 — 18:30	Bus Excursion and visit to the islands of Saint Petersburg and Elagin Palace.
19:00 — 23:00	Conference dinner at the restaurant " Qwakker " (str. Akademika Pavlova 7)

April 19

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10:00 — 10:40	Gleb Koshevoy , Denis Mironov (Moscow Center For Continuous Mathematical Education)

On coefficients of Berenstein-Kazhdan decoration functions for classical groups

10:40 — 11:10	Gaiane Panina (St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences, SPbGU) Combinatorial Ky Fan theorem for sphere bundles
11:10 — 11:30	Coffee break
11:30 — 12:00	Anton Mamonov (Patrice Lumumba Peoples' Friendship University of Russia; Moscow State Psychology-Pedagogy University) The software Glnv for calculating involutive bases of polynomial ideals
12:00 — 12:30	Ksaverii Malyshev (Skobeltsyn Institute of Nuclear Physics; Peoples' Friendship University of Russia) Divergent Fourier Series and Summation in Finite Terms Using the Krylov Method in CAS
12:30 — 13:00	Ioannis Parasidis (Department of Environmental Sciences, University of Thessaly) Nonlocal problem for System of first order linear Integro-Differential equations
13:00 — 15:00	Lunch in the Hotel Kamennooostrovskaya
15:00 — 15:30	Sergei Soloviev (Université Toulouse 3 Paul Sabatier, IRIT (Institut de Recherche en Informatique de Toulouse)) Paradoxes of Game Semantics
15:30 — 15:45	Keston Bhola (St. George's University, School of Arts and Sciences) Teaching Fractals with Technology: Examples
15:45 — 16:00	Dishon Edwards (St. George's University) Teaching Statistics with Technology
16:00 — 16:20	Coffee break
16:20 — 16:50	Nikolay Vasilyev (St.Petersburg Department of Steklov Mathematical Institute) A new proof of Maclagan's theorem
16:50 — 17:20	Arsen Khvedelidze , Dimitar Mladenov, Astghik Torosyan (Joint Institute for Nuclear Research) On the parameterizations of the special unitary group $SU(4)$ and related double cosets
17:10 — 17:40	Vladimir Turaev (Indiana University) Basics of topological data analysis
