

# Conference “SIMC Youth Race”

March 13–17, 2023

Steklov Mathematical Institute of RAS, Moscow, Russia

conference hall, 9 floor

## March 13, Monday. Algebra, geometry, and topology

11.00–11.40	Vasilii Rozhdestvenskii. On a lower bound in the problem of realization of cycles
12.00–12.40	Indira Zeinikesheva. Equivariant formality of moment-angle complexes
12.50–13.30	Georgy Chernykh. $SU$ -linear operations and $c_1$ -spherical bordism theory
15.00–15.40	Egor Teplyakov. Topological methods in condensed matter physics
15.50–16.30	Mikhail Kornev. Dynamics and Multivalued Groups
16.50–17.30	Wenhao Wang. Orders on Free Metabelian Groups (Zoom)

## March 14, Tuesday. Algebraic geometry

10.10–10.50	Mikhail Ovcharenko. Dolgachev–Nikulin duality for fibers of toric Landau–Ginzburg models of smooth Fano 3-folds (joint work with A. Harder)
11.00–11.40	Dmitrii Pirozhkov. Towards homological projective duality for $\mathrm{Gr}(2, 2n)$
12.00–12.40	Alexandra Kuznetsova. Automorphisms of families of abelian varieties
12.50–13.30	Konstantin Loginov. Regularity of Fano threefolds
15.00–15.40	Bin Wang. Higgs Bundles with Nilpotent Structures
15.50–16.30	Aleksei Golota. Finite groups acting on compact complex parallelizable manifolds
16.50–17.30	Andrey Soldatenkov. The mapping class group action on Teichmüller spaces of hyperkähler manifolds (Zoom)
17.40–18.20	Anastasia Vikulova. Birational automorphism groups of Severi–Brauer surfaces over the field of rational numbers
18.30–	Buffet

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## March 15, Wednesday. Analysis, differential equations, number theory, and applications

11.00–11.40	Alexander Kalmyrin. Distribution of values of quadratic forms
12.00–12.40	Maria Stepanova. What is CR geometry?
12.50–13.30	Elijah Lopatin. On the scalar approach to the weak asymptotics problem for $\mathcal{GN}$ -systems
15.00–15.40	Irina Limonova. Dense weakly lacunary subsystems of orthogonal systems
15.50–16.30	Andrey Dukov. Hyperbolic polycycles and appearing multiple limit cycles
16.50–17.30	Mikhail Garbuz. On the motion of a spinning heavy plate in an ideal fluid

## March 16, Thursday. Mathematical methods for quantum technologies and probability theory

12.00–12.40	Anton Kozubov. Quantum control attack: towards joint estimation of protocol and hardware loopholes
12.50–13.30	Vadim Petruhanov. Optimal control of open quantum system
15.00–15.40	Vsevolod Yashin. Integrable Floquet systems related to logarithmic conformal field theory
15.50–16.30	Gavriil Bakai. Large Deviations for Galton–Watson branching processes with immigration

## March 17, Friday. Theoretical physics

11.00–11.40	Maria Matushko. Anisotropic spin generalization of elliptic Ruijsenaars–Macdonald operators
12.00–12.40	Marina Usova. Holographic RG flows of 3d $\mathcal{N} = 2$ supergravity model
12.50–13.30	Timofei Rusalev. Entanglement entropy of radiation in spherically symmetric black holes
15.00–15.40	Ali Hajilou. Holographic Anisotropic Model for Heavy Quarks in Anisotropic Hot Dense QGP: Magnetic Catalysis
15.50–16.30	Aleksandr Belokon. Operator local quenches in massive scalar field theory
16.50–17.30	Vasilii Pushkarev. Non-equilibrium dynamics after quenches in quantum field theories