III International Conference

"Mathematical Physics, Dynamical Systems, Infinite-Dimensional Analysis",

dedicated to the 100th anniversary of V.S. Vladimirov,

the 100th anniversary of L.D. Kudryavtsev and the 85th anniversary of O.G. Smolyanov

(July 5–13, 2023, Moscow Region, Dolgoprudny)

5 July

9.00—10.00   registration (first floor hall, near 123)

9.30—10.00   Coffee break (Concert Hall foyer)

10.00—10.30   Conference opening

Plenary talks (aud. 123)

Chairman Sakbaev Vsevolod

10.30—11.15   **Aref'eva Irina** (Steklov Mathematical Institute). *Quantum structure of black holes*

11.20—12.05   **Vedenyapin Victor** (Keldysh Institute of Applied Mathematics). *On Vlasov type Equations: derivation, hydrodynamic and Hamilton-Jacobi consequences, and cosmological solutions*

12.10—12.55   **Gough John** (Aberystwyth University). *Efforts and flows in quantum systems*

13.00 – 14.30   Lunch break

Section 1 (aud. 123)

Chairman Kozyrev Sergey

14.30—15.00   **Trushechkin Anton** (Steklov Mathematical Institute). *On pre-relaxation of system and reservoir in an exactly solvable model of an open quantum system*

15.05—15.35   **Teretenkov Alexander** (Steklov Mathematical Institute). *On development of projection methods for master equation derivation*

15.40—16.10   **Khazhin Ruslan** (Kazan Federal University). *On generating phase-damping channels*

Section 2 (aud. 117)

Chairman Efremova Lyudmila

14.30—15.00   **Bratus Alexander** (Professor). *Nonlinear wave in hypercycle with infinity many members*

15.05—15.35   **Zhukova Nina,** Bogolepova Elena (Higher School of Economics). *Lorentz 2-orbifolds of constant non-zero curvature with the essential isometry group*

15.40—16.10   **Minkov Stanislav,** Okunev A., Shilin I. (Brook Institute of Electronic Control Machines). *Attractors with non-invariant interior*

Section 3 (aud. 113)

Chairman Gusev Nikolay

14.30—15.00 **Bezrodnykh Sergey**, Gordeeva Nadezhda (FRC CSC RAS). *Solution of a non-local boundary value problem simulating plasma perturbation by an electric field*

15.05—15.35 **Pikulin Sergey**, Bezrodnykh Sergey (FRC CSC RAS). *On the numerical-analytical method for the Burgers equation*

15.40—16.10 **Gladkov Alexander** (Belarusian State University). *Blow-up of solutions of nonlocal parabolic equation under nonlocal boundary condition*

16.15—16.30 Coffee break

Plenary talks (aud. 123)

Chairman Zelenov Evgenii

16.30—17.15 **Volovich Igor** (Steklov Mathematical Institute). *Spaces of negative dimensions in mathematical physics*

17.20—18.05 **Accardi Luigi** ("Tor Vergata" University of Rome). *Quantum theories canonically associated to orthogonal polynomials, Pearson classes and integrable quantum systems*

19.00—21.00 Buffet table

6 July

Plenary talks (aud. 123)

Chairman Teretenkov Alexandr

10.00 – 10.30   **Holevo Alexander** (Steklov Mathematical Institute). *Multiplication formulas for Gaussian operators*

10.35 – 11.05   **Dragovich Branko** (University of Belgrade). *Nonlocal de Sitter gravity and its exact cosmological solutions*

11.10—11.40   **Zharinov Victor** (Steklov Mathematical Institute). *Navier–Stokes equations, the algebraic aspect*

11.45 – 12.00   Coffee break

Section 1 (aud. 123)

Chairman Ivanov Grigorii

12.00—12.30   Ushakov Vladimir, **Ershov Aleksandr,** Ushakov Andrey (Krasovskii Institute of Mathematics and Mechanics). *Linear interpolation of program control with respect to a multidimensional parameter in the convergence problem*

12.35—13.05   **Kovalevsky Alexander** (Krasovskii Institute of Mathematics and Mechanics). *Limits of constrained minimum problems in variable domains*

13.10—13.40   **Lopushanski Mariana** (Steklov Mathematical Institute). *Construction of curves on proximally smooth sets in Hilbert spaces*

13.45—15.00   Lunch break

Chairman Lopushanski Mariana

15.00—15.30   **Frolkina Olga** (Lomonosov Moscow State University). *On projections of a compact set in R^N*

Section 2 (aud. 117)

Chairman Demina Maria

12.00—12.30   **Kochergin Andrey** (Lomonosov Moscow State University). *On cylindrical maps with escaping orbits and rotation angles*

12.35—13.05   **Vyugin Ilya** (Institute for Information Transmission Problems of RAS). *Isomonodromic deformations on an elliptic curve*

13.10—13.30   **Safonov Klim** (Higher School of Economics). *The Collet–Eckmann set for a family of one-dimensional non-smooth Lorenz maps*

13.35—15.00   Lunch break

15.00—15.30   **Efremova Lyudmila** (Lobachevsky State University of Nizhny Novgorod). *Ramified continua as global attractors of C1-smooth self-maps of a cylinder close to skew products*

15.35—16.05   **Makhrova Elena** (Lobachevsky State University of Nizhny Novgorod). *Topological entropy and minimal sets of continuous maps on ramified continua*

16.10—16.30   **Shalagin Matvey**, Efremova Lyudmila (Lobachevsky State University of Nizhny Novgorod). *On ω-limit sets of simplest skew products defined on n-dimensional cells*

Section 3 (aud. 113)

Chairman Budochkina Svetlana

12.00—12.30   **Shaposhnikova Tatiana** (Lomonosov Moscow State University). *On the strange nonlocal homogenized problem arising as the limit of a Poisson equation with dynamical Signoroni conditions on the boundary of perforations of critical size and arbitrary shape*

12.35—13.05   **Mulyukov Mikhail** (Perm State University). *On the asymptotic stability of the hybrid systems*

13.10—13.40   **Smirnova Ekaterina,** Dobrokhotov Sergey (IKBFU). *Solution of a one-dimensional initial-boundary value problem for the Klein-Gordon equation on the semiaxis and its asymptotics*

13.45—15.00   Lunch break

Chairman Volkov Boris

15.00—15.30   **Morzhin Oleg** (Steklov Mathematical Institute, University of Science and Technology MISIS). *On optimization of coherent and incoherent controls in one- and two-qubit open systems*

15.35—15.55   **Petruhanov Vadim** (Steklov Mathematical Institute, University of Science and Technology MISIS). *Dynamics and gradient optimization of a two-level open quantum system*

16.00—16.20   **Elovenkova Maria** (Steklov Mathematical Institute). *On measurement-assisted control in a three-level quantum system with dynamical symmetry*

16.30—16.45   Coffee break

Plenary talks (aud. 123)

Chairman Efremova Lyudmila

16.45—17.30   **Ryzhikov Valery** (Lomonosov Moscow State University). *Finitely generated weak closures of ergodic actions*

17.35—18.20   **Sanjuan Miguel A. F.** (Universidad Rey Juan Carlos). *Noise effects on chaotic Hamiltonian dynamics*

18.25—19.10   **Lozi Rene** (Université Côte d'Azur), Elaydi Saber. *Analysis of a SEIT compartmental model of transmission of Tuberculosis with treatment*

7 July

Plenary talks (aud. 123)

Chairman Turilova Ekaterina

9.00—9.45 **Sukochev Fedor** (University of New South Wales). *Alain Connes' questions on spectral asymptotics*

9.50—10.00 Coffee break

10.00 – 10.45 **Rykov Yuri (**Keldysh Institute of Applied Mathematics). *The interaction of shocks in 2D pressureless medium*

10.55—11.40 **Sergeev Armen** (Steklov Mathematical Institute). *Hermitian Yang–Mills equations and their generalizations*

11.45 – 11.50 Фотографирование

11.50 -- 12.00 Coffee break

17.35—19.35 **Evening of memories of V.S. Vladimirov** (aud. 123)

Section 1 (aud. 123)

Chairman Sakbaev Vsevolod

12.00—12.30 **Musin Il'dar** (Institute of Mathematics with Computing Centre of RAS). *On classes of holomorphic functions in tube domains*

12.35—13.05 **Nasibullin Ramil** (Kazan Federal University). *Hardy type inequalities with remainders*

13.10—13.40 **Garifullin Rustem** (Institute of Mathematics with Computing Centre of RAS). *On classifications of hyperbolic semidiscrete equations*

13.45—15.00 Lunch break

Chairman Garifullin Rustem

15.00—15.30 **Markovskiy Aleksey** (Krasnodar State University). *On the conditions for the existence of a boundary value in a polyharmonic function*

15.35—16.05 **Shishkina Elina,** Alzamili Kh. (Voronezh State University). *About singular Klein–Gordon equality*

Section 2 (aud. 117)

Chairman Trushechkin Anton

12.00—12.30 **Kozyrev Sergei** (Steklov Mathematical Institute). *Population genetics and learning theory*

12.35—13.05 **Ogarkov Stanislav** (Moscow Institute of Physics and Technology). *S-matrix and vacuum energy in nonlocal scalar QFT with fractional power self-interaction*

13.10—13.40   **Krym Victor** (St. Petersburg State University*). Metrics of space-time: the holonomic Kaluza–Klein theory and the nonholonomic model of sub-Lorentzian geometry*

13.45—15.00   Lunch break

Chairman Ivanov Mikhail

15.00—15.30   **Dudnikova Tatiana** (Keldysh Institute of Applied Mathematics). *Derivation of the transport equation for the harmonic crystal coupled to a Klein–Gordon field*

15.35—16.05   **Melikian Margarita** (Lomonosov Moscow State University, Moscow Institute of Physics and Technology). *On dynamics of large particle systems with interaction in different fields*

16.10—16.40   **Pchelintsev Valerii** (National Research Tomsk State University). *On estimates for the energy levels of a quantum billiard*

16.45—17.15   **Postnov Sergey** (Trapeznikov Institute of Control Sciences). *Moments method in optimal control investigation and state estimation for fractional-order systems*

Section 3 (aud. 113)

Chairman Gumerov Renat

12.00—12.30   **Stukopin Vladimir** (Moscow Institute of Physics and Technology). *Affine super Yangian and quantum Weyl groupoid*

12.35—13.05   **Voronin Ilia**, Stukopin Vladimir, Grudsky S., Barrera M. (Moscow Institute of Physics and Technology). *Asymptotics of the eigenvalues of seven-diagonal Toeplitz matrices of a special form*

13.10—13.40   **Bufetov Alexander** (Steklov Mathematical Institute). *Gaussian multiplicative chaos for the sine-process*

13.45—15.00   Lunch break

Chairman Shamarov Nikolay

15.00—15.30   **Bikchentaev Airat** (Kazan Federal University). *Commutators in C*-algebras and traces*

15.35—16.05   **Napalkov Valerii**, Nuyatov Andrey (Institute of Mathematics with Computing Centre of RAS). *On the question of embedding Hilbert spaces with a reproducing kernel*

16.10—16.40   **Galkin Oleg**, Galkina Svetlana, Remizov Ivan (Higher School of Economics). *Error of Chernoff approximations based on Chernoff function with a given t^2-coefficient*

16.45—17.15   **Votyakova Mariya,** Minenkov Dmitriy (Ishlinsky Institute for Problems in Mechanics of RAS). *The effect of heat generation on the stream in the pipe and locking the flow*

17.20—17.35   Coffee break

8 July

Plenary talks (aud. 123)

Chairman Sakbaev Vsevolod

10.00 – 10.45   **Ayupov Shavkat** (V. I. Romanovskiy Institute of Mathematics). *Derivations on operator algebras*

10.55—11.40   **Shavgulidze Evgeniy** (Lomonosov Moscow State University). *Feynman integrals in quantum gravity*

11.45 – 12.00   Coffee break

Section 1 (aud. 123)

Chairman Amosov Grigorii

12.00—12.30   **Turilova Ekaterina** (Kazan Federal University). *Symmetries of C*-algebras and Jordan morphisms*

12.35—13.05   **Zelenov Evgenii** (Steklov Mathematical Institute). *On the Wehrl entropy lower bound for a locally compact abelian group*

13.10—13.40   **Shirokov Maksim** (Steklov Mathematical Institute). *Lower semicontinuity of the relative entropy disturbance and its corollaries*

13.45—15.00   Lunch break

Chairman Sakbaev Vsevolod

15.00—15.30   **Haliullin Samigulla** (Kazan Federal University). *Convex structure of generalized states, effects and ultraproducts*

15.35—16.05   **Amosov Grigori** (Steklov Mathematical Institute). *On calculating the classical capacity of quantum channels generated by probability distributions on finite groups*

16.10—16.40   **Lipacheva Ekaterina** (Kazan State Power Engineering University). *Automorphisms of the semigroup C^*-algebra for the free product of semigroups of rational numbers*

16.45—17.15   **Gumerov Renat** (Lobachevskii Institute of Mathematics and Mechanics, Kazan Federal University). *Automorphisms of limits for inductive sequences of the Toeplitz–Cuntz algebras and generalized means on the P-adic solenoids*

Section 2 (aud. 117)

Chairman Makhrova Elena

12.00—12.30   **Missarov Mukadas**, Khajrullin Dmitrii (Kazan Federal University). *Dynamic properties of the renormalization group in generalized fermionic hierarchical model*

12.35—13.05   **Vasilyev Vladimir** (Belgorod State National Research University). *Pseudo-differential equations in non-smooth domains*

13.10—13.40   Kulikov Anatoly, **Kulikov Dmitry** (Demidov Yaroslavl State University). *Local attractors of the Cahn-Hilliard-Oono equation*

13.35—15.00   Lunch break

Chairman Kulikov Anatoly

15.35—16.05   **Rassadin Alexander** (Higher School of Economics). *Remark on boundary conditions forthe KPZ equation*

16.10—16.40   **Gasparyan Armenak** (Professor). *Some generalizations of classical identities and inequalities means of multidimensional determinants*

Section 3 (aud. 113)

Chairman Ogarkov Stanislav

12.00—12.30   **Polushkin Alexandr,** Ivanov Mikhail (Moscow Institute of Physics and Technology). *Renormalizations in digital representation of continuous observables*

12.35—12.55   **Ivanov Mikhail** (Moscow Institute of Physics and Technology), Dudchenko Vladimir (Vernadsky Institute of Geochemistry and Analytical Chemistry), Naumov Victor (Moscow Institute of Physics and Technology), Polushkin Alexandr (Moscow Institute of Physics and Technology). *Number-theory renormalization*

13.00—13.20   **Dudchenko Vladimir** (Vernadsky Institute of Geochemistry and Analytical Chemistry), Ivanov Mikhail (Moscow Institute of Physics and Technology). *Theorem on Number-theory Renormalization of vacuum energy in QFT on the lattice*

13.25—13.45   **Naumov Victor** (Moscow Institute of Physics and Technology). *Theorem on number-theory renormalization of vacuum energy in QFT on the lattice*

13.45—15.00   Lunch break

Chairman Gusev Nikolay

15.00—15.30   **Korobkov Mikhail** (Fudan University). *On applications of real analysis methods to steady-state Navier–Stokes system*

15.35—16.05   **Bobkov Vladimir** (Institute of Mathematics with Computing Centre of RAS). *Szego–Weinberger type inequalities for symmetric domains with holes*

16.10—16.40   **Anoop Thazhe Veetil** (Indian Institute of Technology Madras). *On reverse Faber–Krahn inequalities*

16.45—17.15   **Ashok Kumar Kurva** (TIFR Centre for Applicable Mathematics). *On strict monotonicity of the p-torsional rigidity over annuli*

17.20—17.35   Coffee break

Plenary talks (aud. 123)

Chairman Efremova Lyudmina

17.35—18.20   **Mamaev Ivan,** Bizyaev Ivan, Kilin Alexander (Kalashnikov Izhevsk State Technical University). *Nonlinear acceleration in nonholonomic mechanics*

18.25—19.10   **Faminskii Andrei** (RUDN). *Direct and inverse problems for odd-order quasilinear evolution equations*

Excursions, Museum of Moscow Institute of Physics and Technology (Корпус Прикладной Математики МФТИ)

11.00 -- …

10 July

Plenary talks (aud. 113)

Chairman Rautian Nadezhda

10.00 – 10.45   **Dobrokhotov Sergey,** Nazaikinskii Vladimir (Ishlinsky Institute for Problems in Mechanics of RAS, Moscow Institute of Physics and Technology). *Effective asymptotics of linear (pseudo)differential equations with localized right hand sides*

10.55—11.40   **Dubinskii Julii** (Moscow Power Engineering Institute). *On the singular trace of the main operations of field theory*

11.45 – 11.55   Coffee break

11.55—12.40   **Skubachevskii Alexandr** (RUDN). *A priori estimates of solutions to mixed problems for the Vlasov-Poisson system and plasma kinetics in a cork trap*

17.35—19.35   **Evening of memories of L.D. Kudryavtsev** (aud. 123)

12.45—13.45 One-line Poster session (aud. **117)**

Chairmans Bobkov Vladimir, Zaytseva Natalia

12. 45—13.05 (123) **Gangwar Pushpender Kumar** (Bareilly College). *Temperature and entropy of self-gravitating dusty atmosphere behind cylindrical shock*

13.10 – 13.30 (123) **Takhirov Jozil** (Institute of Mathematics of National University of Uzbekistan). *A free boundary problem with temperature-dependent thermal conductivity with power-law nonlinearities*

12.45 – 13.05 (117) **Rodina Lyudmila** (National University of Science and Technology MISIS). *On the property of monotonicity of solutions of systems with respect to initial conditions*

13.10 – 13.30 (117) **Tashpulatov Sa'dulla** (Institute of Nuclear Physics of Academy of Sciences of Republic of Uzbekistan). *Structure of essential spectrum and discrete spectra of the energy operator of six electron systems in the hubbard model. third singlet state*

13.35—13.50 (117) **Meretukov Khazret,** Teretenkov Alexander (Lomonosov Moscow State University). *Methods for description of open quantum system dynamics based on the thermodynamical approach*

12.45 – 13.45 Off-line Poster session *(at the coffee-brake hall)*

Pavlov Andrey (MIREA-RTU). *Periodicity and different systems of co-ordinates*

Posadskii Artem (Lebedev Physical Institute). *Probability measure on conformal mappings*

Rezbaev Airat (Higher School of Economics). *On one integral inequality for logarithmic derivatives of measures*

Karasev Artem, Teretenkov Alexander (Steklov Mathematical Institute). *Master equation, projection operator technique*

Wang Yu (Lomonosov Moscow State University). *Generalized measures and symmetries in infinite-dimensional spaces*

Cheng Shiyao (Lomonosov Moscow State University). *Investigation of asymptotics of solutions of 2nd order differential equations with meromorphic coefficients*

13.55—15.00   Lunch break

Section 1 (aud. 123)

Chairman Novikov Sergey

15.00—15.30   **Bovkun Vadim,** Melnikova Irina (Ural Federal University). *Semigroups of operators associated to stochastic processes and their generators*

15.35—16.05   **Kinderknecht (Butko) Yana** (Universität Kassel). *Subordination principle and Feynman-Kac formulae for generalized time fractional evolution equations*

16.10—16.40   **Belopolskaya Yana** (Sirius University of Science and Technology). *Probabilistic models of fully nonlinear second order PDEs*

16.45—17.15   **Boudref Mohamed Ahmed** (University of Bouira). *About Massera's theorem of N-dimensional stochastiques differential equations*

Section 2 (aud. 117)

Chairman Shishkina Elina

15.00—15.30   **Rautian Nadezhda** (Lomonosov Moscow State University). *Semigroup approach to studying Volterra integro-differential equations arising in viscoelasticity theory*

15.35—16.05   **Zaitseva Natalya** (Lomonosov Moscow State University). *Nonlocal problems with an integral condition for mixed-type equations*

16.10—16.40   **Tasevich Alla** (RUDN). *Solvability problem of elliptic functional differential equations with orthotropic contractions in weighted spaces*

16.45—17.15   **Osipov Andrey** (Institute for System Analysis). *Miura-like transformations of nonlinear lattices and inverse spectral problems for band operators*

Section 3 (aud. 113)

Chairman Zhuzhoma Eugenii

15.00—15.30   Kanel-Belov Alexei, Rukhovich Philipp, **Timorin Vladlen**, Zgursky Valery (Higher School of Economics). *Dual billiards outside of regular polygons: self-similarity*

15.35—15.55 **Tonysheva Nicole,** Zhukova Nina (Higher School of Economics). *Topological conjugacy of chaotic homeomorphism groups of surfaces with boundary*

16.00—16.20   **Levin Gleb,** Zhukova Nina (Higher School of Economics). *Sensitivity to initial conditions of some class of topological foliations*

16.25—16.55   **Demina Maria** (Higher School of Economics). *Invariants and integrability of polynomial Liénard and Levinson–Smith differential systems*

17.20—17.35   Coffee break

20.00 – 23.00   **Banquet** (Дом Ученых, ул. Первомайская, д. 18)

11 July

Plenary talks (aud. 113)

Chairman Sakbaev Vsevolod

10.00 – 10.45   **Bogachev Vladimir** (Lomonosov Moscow State University). *Distributions obtained by regularization of non-integrable functions*

10.55—11.40   **Shafarevich Andrei** (Lomonosov Moscow State University). *Semiclassical asymptotics for equations with singularities*

11.45 – 12.00   Coffee break

Section 1 (aud. 123)

Chairman Savchin Vladimir

12.00—12.30   **Novokshenov Victor** (Institute of Mathematics Ufa Research Center of RAS). *The real poles of the third transcendent are Painlevé*

12.35—13.05   **Akmanova Svetlana** (Nosov Magnitogorsk State Technical University). *Bifurcations of codimension 2 of nonlinear hybrid dynamical systems with constant discretization step*

13.10—13.30   **Vildanova Venera** (Institute of Mathematics Ufa Research Center of RAS). *On existence of entropy solution for equation with measure valued potential*

13.35—15.00   Lunch break

Chairman Novokshenov Viktor

15.00—15.30   **Savchin Vladimir**, Trinh Phuoc Toan (RUDN). *On integral invariants of Birkhoff equations for infinite-dimensional systems*

15.35—16.05   **Budochkina Svetlana** (RUDN). *On symmetries and conservation laws for some differential equations*

16.10—16.40   **Allilueva Anna** (Moscow Institute of Physics and Technology). *Short-wave asymptotic solutions of a general hyperbolic equation*

16.45 – 17.15   **Stepanov Eugene** (St. Petersburg Branch of the Steklov Research Institute of Mathematics). *Point to point controllability for systems with drift*

Section 2 (aud. 117)

Chairman Efremova Lyudmila

12.00—12.30   **Zhuzhoma Evgeny,** Grines V., Medvedev V. (Higher School of Economics). *Topological structure of manifolds supporting axiom A systems*

12.35—13.05   **Ageev Oleg** (Lomonosov Moscow State University). *On metric invariants of dynamical systems*

13.10—13.40   **Podvigin Ivan** (Sobolev Institute of Mathematics, Novosibirsk State University). *Rate of convergence of ergodic averages for Z^2 and R^2 actions via estimates of spectral measure*

13.45—15.00   Lunch break

15.00—15.30   **Kruglov Evgeniy** (Lobachevsky State University of Nizhniy Novgorod). *Scenario of the mildly stable transition from a structurally stable 3-diffeomorphism with a two-dimensional expanding attractor to a hyperbolic automorphism*

15.35—16.05   **Kibkalo Vladislav** (Lomonosov Moscow State University). *Integrable billiard systems on multidimensional CW-complexes*

16.10—16.40   **Vedyushkina Viktoria** (Lomonosov Moscow State University). *Maximally symmetric bifurcations of Liouville tori of billiard books that contain foci*

Section 3 (aud. 113)

Chairman Belopol'skaya Yana

12.00—12.30   **Novikov Sergei** (Samara University). *Reconstruction by modules of measurements of a vector-signal in finite-dimensional and infinite-dimensional spaces*

12.35—13.05   **Popova Svetlana** (Moscow Institute of Physics and Technology, Higher School of Economics). *Kantorovich optimal transportation problems with a parameter*

13.10—13.40   **Imomov Azam** (Karshi state University). *On the explicit generating function expression for the invariant measure of critical Galton–Watson branching systems*

13.45—15.00   Lunch break

Chairman Boris Volkov

15.00—15.30   **Shishanin Andrei (**Moscow Power Engineering Institute). *Some aspects of higher gauge theories*

15.35—16.05   **Kharuk Natalia**, Ivanov Aleksandr (St. Petersburg Department of Steklov Mathematical Institute). *Ordered exponential and its features in Yang–Mills effective action*

16.10—16.40   **Shirokov Dmitry** (Higher School of Economics). *Classification of all constant solutions of SU(2) Yang–Mills equations*

17.20—17.35   Coffee break

Plenary talks (aud. 113)

Chairman Efremova Lyudmila

17.35—18.20   **Oseledets Valery** (Federal Research Center for Chemical Physics RAS, Lomonosov Moscow State University). *Erdös measures for 2-Markov chain and m-nacci number*

12 July

Plenary talks (aud. 113)

Chairman Efremova Lyudmila

10.00 – 10.45   **Pechen Alexander** (Steklov Mathematical Institute, University of Science and Technology MISIS). *Quantum control by the environment and by quantum measurements*

10.55—11.40   **Blank Michael** (Institute for Information Transmission Problems of RAS, Higher School of Economics). *Average shadowing property*

11.45 – 12.00   Coffee break

17.35—19.35   **Evening of memories of O.G. Smolyanov** (aud. 123)

Section 1 (aud. 123)

Chairman Dobrokhotov Sergey

12.00—12.30   **Nazaikinskii Vladimir** (Ishlinsky Institute for Problems in Mechanics of RAS). *Uniformization of degenerate equations and semiclassical asymptotics*

12.35—13.05   **Savin Anton**, Zhuikov Konstantin (RUDN). *Eta-invariants for families of operators with shifts*

13.10—13.40   **Aliyev Yagub** (ADA University). *Geometric properties of planar and spherical interception curves*

13.45—15.00   Lunch break

Chairman Savin Anton

15.35—16.05   **Imaykin Valeriy** (Moscow School 179). *On stability of solitons for a rotating charge with a fixed center of mass in the Maxwell field*

16.10—16.40   **Izmest'ev Igor',** Ukhobotov Victor (Chelyabinsk State University). *Control problem for a parabolic system with disturbances and a convex goal*

16.45—17.15   **Elaydi Saber** (Trinity University). *A Journey into Global Stability: From Monotone to Mixed Monotone and from autonomous to nonautonomous*

Section 2 (aud. **426**)

Chairman Morzhin Oleg

12.00—12.30   **Volkov Boris** (Steklov Mathematical Institute, University of Science and Technology MISIS). Higher order traps in quantum control landscapes

12.35—12.55   **Myachkova Anastasya** (Steklov Mathematical Institute, Moscow Institute of Physics and Technology). *Numerical analysis of 3rd and 7th order traps in quantum control landscapes for some three-level and four-level quantum systems*

13.00—13.20 **Kuznetsov** Sergey (Steklov Mathematical Institute, Moscow Institute of Physics and Technology Moscow Institute of Physics and Technology). *On complete controllability of some three- and four-level closed quantum systems*

13.35—15.00 Lunch break

Chairman Shirokov Dmitriy

15.00—15.30 **Sokolov Sergey,** Ryabov Pavel (Moscow Institute of Physics and Technology). *Topology of the phase manifold and bifurcations in a generalized Lagrange top problem*

15.35—16.05 **Palshin Gleb,** Ryabov Pavel (Moscow Institute of Physics and Technology). *Surgery of two Liouville tori into two in one integrable problem of the dynamics of magnetic vortices*

16.10—16.40 **Sidorenko Vladislav** (Keldysh Institute of Applied Mathematics). *Application of a map approximating the phase flow to study the attitude motion of a satellite in a gravitational field*

16.45—17.15 **Kanel-Belov Alexey** (Moscow Institute of Physics and Technology). *On the distribution function of area and perimeter for planar Poisson line process and Voronoi cells*

Section 3 (aud. 113)

Chairman Sakbaev Vsevolod

12.00—12.30 **Shamarov Nikolai** (Lomonosov Moscow State University). *Infinite dimensional generalized functions and their Forier isomorphism*

12.35—13.05 **Loboda Artem** (Lomonosov Moscow State University). *Operator approach for solving stochastic equations*

13.45—15.00 Lunch break

Chairman Shamarov Nikolay

15.00—15.30 **Sakbaev Vsevolod** (Keldysh Institute of Applied Mathematics). *Unitary representation of random transformations of a Hilbert space and limit theorems*

15.35—15.55 **Glazatov Vladimir** (Moscow Institute of Physics and Technology). *Koopman representation of Hamiltonian flows in infinitely dimensional spaces with invariant measures*

16.00—16.30 **Kalmetev Rustem** (Keldysh Institute of Applied Mathematics). *Displacement operators approximations for noncanonical commutation relations*

16.35—16.55 **Zamana Konstantin** (Moscow Institute of Physics and Technology). *Limits of compositions of random semigroups and associated evolution equations*

17.00—17.20 **Malikov Artur** (Moscow Institute of Physics and Technology). *Averaging of random groups related to nonlinear differential equations*

17.20—17.35 Coffee break

13 July

Plenary talks (aud. 123)

Chairman Korovina Maria

10.00 – 10.45 **Ashyralyyev Allaberen**, Ashyralyev Charyyar (Bahcisehir University). *A note single-step difference schemes for the solution of stochastic differential equations*

10.55—11.40 **Matevossian Hovik** (FRC CSC RAS). *Elliptic problems in weighted spaces*

11.45 – 12.00 Coffee break

Section 1 (aud. 123)

Chairman Matevossian Hovik, Zhaglova Anna

12.00—12.30 **Dorodnitsyn Mikhael A.** (FRC CSC RAS), Matevossian H. A. *On solutions of a boundary value problem for a polyharmonic equation in a half-Space*

12.35—13.05 Matevossian H. A., **Smirnov Vladimir Yu**. (Moscow Aviation Institute). *Behavior at infinity of solutions of a mixed problem for a hyperbolic equation with periodic coefficients on the semi-axis*

13.10—13.40 **Kovalev Andrei** (FRC CSC RAS), Matevossian H. A. *On the fourth order nonlinear Helmholtz equation*
13.45—15.00 Lunch break

Chairman Sakbaev Vsevolod

15.00—15.30 **Korovina Maria** (Lomonosov Moscow State University). *Asymptotics of solutions of differential equations in the vicinity of irregular singular points in the space of functions of k-exponential growth. The Poincare problem*

15.35—16.05 **Zhaglova Anna** (OGRI), Ibragimov Akif (Texas Tech University), Anikiev D. (OGRI), Indrupskiy I. (OGRI), Zakirov E. (OGRI). *Material balance equation as a method of sewing analytical and numerical solutions for the three regimes of the flows*

16.10—16.40 **Shishkov Andrey** (RUDN). *Very singular and large solutions of semi-linear parabolic and elliptic equations*

Section 2 (aud. 419)

Chairman Sakbaev Vsevolod

12.00—12.30 **Kalinin Aleksey**, Tyukhtina Alla, Maslov A.S. (Lobachevsky State University of Nizhny Novgorod). *Problems of determining quasi-stationary electromagnetic fields in weakly inhomogeneous media*

12.35—13.05 **Tyukhtina Alla** (Lobachevsky State University of Nizhny Novgorod). *Inverse problems of atmospheric electricity in quasi-stationary approximations*

13.35—15.00 Lunch break

Chairman Kalinin Aleksey

15.00—15.30   **Maltsev Andrey** (Landau Institute for Theoretical Physics). *Dynamical systems on Fermi surfaces and galvanomagnetic phenomena in metals*

15.35—16.05   **Gaydukov Roman** (Higher School of Economics). *Ice-water phase transition in flow along small irregularities*

16.10—16.40   **Beklaryan Leva A.,** Beklaryan A.L. (Moscow Institute of Physics and Technology). *Dualism of the theory of soliton solutions for infinite-dimensional dynamical systems and pointwise functional differential equations*

16.45—17.15 **Section 3** (aud. 113)

Chairman Loboda Artem

12.00—12.30   **Kolpakov Egor** (Belgorod State Technological University named after V.G. Shukhov). *On a class of functionals Feynman Integrable in the sense of analytic continuation*

12.35—12.55   **Ampilogov Andrey** (Lomonosov Moscow State University*). Methods for calculating functional integrals*

13.00—13.20   **Nadyarnykh Ilya** (Lomonosov Moscow State University*). Logarithmic derivative of the generalized measure*

13.35—15.00   Lunch break

Chairman Efremova Lyudmila

16.10—16.40   **Dymarskii Yakov** (Moscow Institute of Physics and Technology). *Functional of eigenvalues on the manifold of potentials*

16.45—17.15   **Abdelouahab Mohammed-Salah** (Abdelhafid Boussouf University Center). *Nonlinear dynamics of a remanufacturing duopoly model and its chaos control*

17.20—17.35   Coffee break

Plenary talks (aud. 113)

Chairman Sakbaev Vsevolod

17.35—18.20   **Vlasov Vladimir,** Skorokhodov Sergey (FRC CSC RAS). *Conformal mapping of an L-shaped domain in analytical form*

18.25—19.10   **Muravnik Andrey** (RUDN). *Half-space Dirichet problem with summable boundary-value functions for elliptic equations with general-kind nonlocal potentials*

19.10—19.30   Conference closing