Satellite International Conference of Nonlinear Dynamics & Integrability
27.06.2022 – 01.07.2022

Conference Programme
All conference talks are scheduled in Moscow Time (GMT+3).

Monday, 27.06.2022

	Plenary talks combined with lectures for the Scientific School
09:00–09:45	Conference Registration
09:45–10:00	IT company "Tensor", Rector YarSU
10:00–10:50	V. Kozlov, "Instability of equilibria in a solenoidal force field" **(online, in Russian)**
10:50–11:20	**Coffee break**
11:20–12:10	S. Kashchenko, "Construction of quasinormal forms in the problem of vibration of pedestrian bridges" **(in Russian)**
12:10–13:00	D. Talalaev, "Oscillatory matrices and cluster algebras"
13:00–14:00	**Lunch break**

	Section talks: Nonlinear Dynamics & Integrable Systems
14:00–14:30	M. Matushko, "Anisotropic spin generalization of elliptic Macdonald-Ruijsenaars operators"
14:30–15:00	A. Kazakov, "Electrical networks and the positive part of Lagrangian Grassmannian" **(online)**
15:00–15:30	N. Nefedov, "Asymptotic approximation of boundary control problem for Burgers-type equation with modular advection"
15:30–16:00	N. Hounkonnou, "Kepler dynamics on a conformable Poisson manifold" **(online)**
16:00–16:30	**Coffee break**
16:30–17:00	E. Tsaplina, "Criterion for the existence of a connected characteristic space of orbits in a gradient-like diffeomorphism of a surface" **(in Russian)**
17:00–17:30	V. Galkin, "Spherical flow diagram with finite hyperbolic chain-recurrent set" **(in Russian)**
17:30–18:00	N. Timofeeva, "On a moduli space of admissible pairs in arbitrary dimension: recent results"
18:00–19:00	**Poster session**
19:00	**Conference Dinner**

Posters / Online posters
V. Alexeev, “Existence of discrete traveling waves in a fully connected relay system of Mackey–Glass type equations”
M. Balabaev, “On the geometry of trajectories of dynamical systems”
D. Baranov, “Knot as a complete invariant of diffeomorphisms of surfaces with three periodic orbits”
A. Khakimova, “Construction of exact solutions to the Ruijsenaars-Toda lattice via generalized invariant manifolds”
V. Kibkalo, “Noncompact foliations of several integrable systems in Pseudo-Euclidean space”
F. Lobzin, “Generalized Mishchenko-Fomenko conjecture for singular points of Lie algebras”
D. Kosterin, “Step solutions of quasi-normal form for a boundary value problem with mean value”
V. Litvinov, “Transverse vibrations of viscoelastic beams of variable length, taking into account the action of damping forces”
I. Maslenikov, “Local dynamics of a second-order equation with a delay at the derivative”
E. Nikulin, “Existence of Contrast Structures in a Problem with Discontinuous Reaction and Advection”
E. Plavalova, “Selected results of numeric integration approximation in the problem of n-body”
M. Onufrienko, “Typical integrable Hamiltonian systems on a six-dimensional symplectic manifold”
A. Orlov, “Instability of contrast structures in reaction-diffusion problems in case of reaction discontinuity”
M. Pogrebnyak, “Behaviour of the solutions of a traffic flow mathematical model”
M. Preobrazhenskaia, “On the equation of tetrahedra, the local Yang–Baxter equation and self-distributive structures”
A. Rassadin, “Exact solution of one countable-dimensional system of nonlinear partial differential equations”
L. Romakina, “The Chaos game in the hyperbolic plane of positive curvature”
A. Rosaev, “To the model of asymmetric pendulum”
K. Sakkaravarthi, “Bright Solitons in a (2+1)-dimensional Oceanic Model: Dynamics, Interaction and Molecule Formation”
D. Samsonov, “Existence and stability of a stationary solution with a two-scale transition layer of a system of two singularly perturbed second-order differential equations with quasimonotonity conditions of different signs”
J Schumm, “Local normal forms for Kahler metrics admitting c-projective vector fields”
T. Tarasova, “Synchronous collisions of solitons of the Korteweg–de Vries equation: exact solutions and statistical properties”
B. Tishchenko, “Existence of solutions for the system of two ODEs with modulus-cubic nonlinearity”
A. Trofimova, “Crossover scaling functions in the asymmetric avalanche process”

Tuesday, 28.06.2022

	Plenary talks combined with lectures for the Scientific School
09:10–10:00	E. Pelinovsky, "Korteweg–de Vries equation with power nonlinearity: solitons, compactons and rogue waves"
10:00–10:50	O. Pochinka, "Knot as a complete invariant of Morse-Smale 3-diffeomorphisms with four fixed points"
10:50–11:20	**Coffee break**
11:20–12:10	V. Buchstaber, "Graded Korteweg–de Vries hierarchy and polynomial integrable systems"
12:10–13:00	A. Mikhailov, "Bi-Hamiltonian and bi-quantum structure of integrable hierarchies" **(online)**
13:00–14:00	**Lunch break**

	Section talks: Nonlinear Dynamics & Integrable Systems
14:00–14:30	S. Glyzin, TBA **(in Russian)**
14:30–15:00	S. Sokolov, TBA
15:00–15:30	A. Kashchenko, "Asymptotics of the solutions of one nonlinear equation with delay"
15:30–16:00	E. Nozdrinova, "Stable arcs connecting gradient-like diffeomorphisms on surfaces"**(in Russian)**
16:00–16:30	**Coffee break**
16:30–17:00	D. Shubin, "Non-singular Morse-Smale flows with three periodic orbits on orientable 3-manifolds"
17:00–17:30	A. Morozov, "Determination of the homotopy type of a Morse-Smale diffeomorphism on an orientable surface by a heteroclinic intersection"**(in Russian)**
17:30–18:00	D. Kulikov, "The original version of the Kuramoto–Sivashinsky equation and its local attractors" **(in Russian)**
18:00–18:30	D. Serow, "On the Lebesgue Measure of Birkhoff Curve"

Wednesday, 29.06.2022

	Plenary talks combined with lectures for the Scientific School
09:10–10:00	V. Sokolov, "Classification of matrix systems of $P_2 - P_6$ type with Okamoto integral"
10:00–10:50	G. Falkovich, "Multi-mode correlations as signature of turbulence"**(online)**
10:50–11:20	**Coffee break**
11:20–12:10	R. MacKay, "Integrability of guiding-centre motion for charged particles in magnetic fields" **(online)**
12:10–13:00	B. Rumpf, "Coherent structures in a weakly turbulent environment" **(online)** **(online)**
13:00–14:00	**Lunch break**

	Section talks: Nonlinear Dynamics & Integrable Systems
14:00–14:30	M. Pavlov, "Integrable systems of the intermediate long wave type in 2 + 1 dimensions"
14:30–15:00	A.Yu. Orlov, "Infinite-component KP hierarchy"
15:00–15:30	N. Levashova, "Propagation of an autowave in a medium with discontinuous characteristics"
15:30–16:00	I. Polekhin, "Asymptotically Stable Non-Falling Solutions of the Kapitza-Whitney Pendulum"
16:00–16:30	**Coffee break**
16:30–17:00	A. Anikin, "Librations and asymptotics of spectral bands and gaps of trigonally symmetric dimers"
17:00–17:30	F. Salis, "Kaehler-Einstein metrics with symmetries and integrable structures" **(online)**

Thursday, 30.06.2022

	Plenary talks combined with lectures for the Scientific School
09:10–10:00	A. Bountis, "A Pedagogical Approach to Limit Cycles" **(online)**
10:00–10:50	H. Skokos, "Numerical investigation of spatiotemporal chaos in multidimensional Hamiltonian systems" **(online)**
10:50–11:20	**Coffee break**
11:20–12:10	E. Christodoulidi, "The Impact of Adiabatic Invariants on the dynamics of the Fermi–Pasta–Ulam–Tsingou model" **(online)**
12:10–13:00	T. Grava, "Soliton versus the gas" **(online)**
13:00–14:00	**Lunch break**

	Section talks: Nonlinear Dynamics & Integrable Systems
14:00–14:30	P. Grinevich, "Approximate finite-gap formulas for the spatially double-periodic Davey-Stewardson-2 rogue waves"
14:30–15:00	A. Slunyaev, "Hydrodynamic envelope solitons in irregular sea states"
15:00–15:30	A. Abrashkin, "Cauchy invariants and exact solutions of nonlinear equations of hydrodynamics"
15:30–16:00	N. Zolnikova, "Wave-particle resonant interactions in space plasma - efficiency study"
16:00–16:30	**Coffee break**
16:30–17:00	A. Ngapasare, "Wave packet spreading in disordered soft architected structures" **(online)**
17:00–17:30	D. Belonozhko, "On the critical rate of the Kelvin-Helmholtz instability realization"

Friday, 01.07.2022

	Plenary talks combined with lectures for the Scientific School
09:10–10:00	A. Pogrebkov, "Algebraic origins of integrability of nonlinear evolution equations"
10:00–10:50	S. Wabnitz, TBA **(online)**
10:50–11:20	**Coffee break**
11:20–12:10	A. Hone, "Continued fractions and hyperelliptic curves" **(online)**
12:10–13:00	L. Takhtajan, "Symplectic structure of integrable systems" **(online)**
13:00–14:00	**Lunch break**

	Section talks: Nonlinear Dynamics & Integrable Systems
14:00–14:30	I. Habibullin, "On the integrable classification of 3D lattices"
14:30–15:00	P. Xenitidis, "On Symmetries of Quad Systems of Difference Equations" **(online)**
15:00–15:30	P. Kassotakis, "Hierarchies of compatible maps and integrable non-Abelian difference systems" **(online)**
15:30–16:00	G. Grahovksi, "On real Hamiltonian forms of affine Toda field" **(online)**
16:00–16:30	**Coffee break**
16:30–17:00	V. Bardakov, "Braid groups and the Yang–Baxter equation"
17:00–17:30	A. Shavlukov, "Catastrophes of solutions to the equations of an isentropic gas flow and catastrophes of solutions to the linear wave equation"
17:30–18:00	S. Igonin, "Some algebraic and differential-geometric methods in integrable systems with applications to Bäcklund transformations and Zamolodchikov tetrahedron maps"