

Schedule

22.11.2021 (Room 104)

Time (GMT +3)	Speaker	Talk
10:30 – 10:50	Valery Kozlov	Conference Opening
10:50 – 11:30	Dmitry Treschev	On the isochronicity problem
11:30 – 12:10	Alain Albouy	Transformations of Lagrangians and closed orbits (online)
12:10 – 12:50	Ivan Mamaev	Dynamics of an unbalanced circular foil and point vortices in an ideal fluid
12:50 – 14:00	Lunch	
14:00 – 14:40	Tassos Bountis	Energy Transport in 1-D Hamiltonian Lattices With Applications to Physics and Engineering
14:40 – 15:20	Nikolay Kudryashov	Rational solutions of the Burgers hierarchy and generalized Hermite polynomials (online)
15:20 – 15:30	Coffee break	
15:30 – 16:10	Eva Miranda	Contact geometry and fluid dynamics: two sides of a mirror (online)

Time (GMT +3)	Speaker	Talk
16:10 – 16:50	Vladimir Dragović	Resonance of ellipsoidal billiard trajectories and extremal rational functions (online)
23.11.2021 (Room 110)		
11:00 – 11:40	Sergey Bolotin	Normal forms and averaging in an acceleration problem in nonholonomic mechanics
11:40 – 12:20	Anatoly Markeev	On an identical resonance and the stability of Lagrangean solutions to the restricted three-body problem
12:20 – 13:00	Alexander Kilin	Two problems of spherical bodies rolling on a vibrating plane
13:00 – 14:00	Lunch	
14:00 – 14:40	Olga Pochinka	3-Diffeomorphisms with Dynamics “One-Dimensional Surfaced Attractor-Repeller”
14:40 – 15:20	Andrey Tsiganov	On completely noninvariant Killing tensors in Euclidean geometry
15:20 – 15:30	Coffee break	
15:30 – 16:10	Sergey Sokolov	Dynamics of Two Vortices in a Perfect Fluid and in a Bose-Einstein Condensate

16:10 – 16:50	Jair Koiller	Some problems about the dynamics of vortex pairs on surfaces (online)
17:00 – 19:00	Fellowship Banquet	
24.11.2021 – Day Off		
25.11.2021 (Room 104)		
11:00 – 11:40	Valery Kozlov	Quadratic in momenta integrals of circulatory systems
11:40 – 12:20	Sergey Kashchenko (joint work with Anna Tolbey)	Irregular solutions in the spatially distributed Fermi-Pasta-Ulam problem
12:20 – 13:00	Sotiris Konstantinou-Rizos	A discrete Darboux–Lax scheme for solving systems of integrable difference equations
13:00 – 14:00	Lunch	
14:00 – 14:40	Andrei Shafarevich	Reflection and Refraction of Lagrangian Manifolds and Maslov Complex Germs Corresponding to Short-Wave Solutions of the Wave Equation with an Abruptly Varying Velocity
14:40 – 15:20	Ivan Polekhin	The Kapitza-Whitney pendulum
15:20 – 15:30	Coffee break	
15:30 – 16:10	Alexander Burov	Libration points inside a spherical cavity in a uniformly rotating gravitating ball

16:10 – 16:50	Vladislav Sidorenko	Apsidal alignment in double averaged restricted elliptic three-body problem: stability analysis
16:50 – 17:30	Alexander Kuleshov	Existence of Liouvillian solutions in the problem of motion of a heavy rigid body with a fixed point in the Hess case
26.11.2021 (Room 104)		
11:00 – 11:40	Leonid Kurakin, Irina Ostrovskaya	Resonances in the stability problem of a Thomson vortex N-gon inside/outside circular domain and a point vortex quadrupole on a plane
11:40 – 12:20	Mikhail Sokolovskiy	New stationary states of three point vortices in a two-layer rotating fluid
12:20 – 13:00	Evgeny Vetchanin (joint work with E. Artemova)	Motion of a circular disk in the presence of a point source in an ideal fluid
13:00 – 14:00	Lunch	
14:00 – 14:40	Francesco Fasso	On the dynamics of a heavy ball that rolls on a rotating surface of revolution (online)
14:40 – 15:20	Elena Pivovarova	The influence of the friction model on the inversion of the tippe top
15:20 – 15:40	Coffee break	

15:40 – 16:20	Anton Shiryaev	On transverse linearization for controlling forced motions of underactuated mechanical system
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16:20 – 17:00	Yury Karavaev	Experimental verification of the models of various robotic systems
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29.11.2021 (Room 104 / online)

11:40 – 12:20	Alexey Okunev (joint work with Anatoly Neishtadt)	On the phase change for perturbations of one-frequency systems with separatrix crossing
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12:20 – 13:00	Alessandra Celletti	Quasi-periodic attractors for dissipative systems in Celestial Mechanics (online)
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13:00 – 14:00	Lunch	
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14:00 – 14:40	Vyacheslav Grines	On topological classification of dynamical systems with hyperbolic nonwandering sets (online)
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14:40 – 15:20	Alexander Ivanov	A top on a vibrating base: new integrable problem of non-holonomic mechanics (online)
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15:20 – 16:00	Tatiana Salnikova	Steady States of the Vlasov Equation with Modified Potential of the Lennard-Jones Type (online)
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16:00 – 16:40	Elena Kudryavtseva (joint work with A. Oshemkov)	Symplectic classification of structurally stable nondegenerate semilocal singularities (online)
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30.11.2021 (Online)

11:00 – 11:40

Mark Stremler

TBA (online)

11:40 – 12:20

Alain Chenciner

Elliptic fixed points with an invariant foliation:
some facts and more questions (online)

12:20 – 13:00

Iskander Taimanov

Exact solutions of the Davey-Stewartson
equation and minimal surfaces in the four-
space (online)

13:00 – 14:00

Lunch

14:00 – 14:40

Luis García-Naranjo

Platonic solids and symmetric solutions of the
N-vortex problem on the sphere (online)

14:40 – 15:20

Andrzej Maciejewski

Integrability of Hamiltonian systems with
gyroscopic term (online)

15:20 – 16:00

Mark Levi

Topological aspects of stability (online)

16:00 – 16:40

Boris Khesin

Hamiltonian geometry and the golden ratio in
the Euler hydrodynamics (online)

01.12.2021 (Online)

11:00 – 11:40

Holger Dullin

The Lagrange Top and the general confluent
Heun equation (online)

11:40 – 12:20

Yuri Sachkov

Sub-Riemannian geometry on the group of
motions of the plane (online)

12:20 – 13:00	Marko Robnik	Quantum phase space localization in chaotic systems (online)
13:00 – 14:00	Lunch	
14:00 – 14:40	Alexey Bolsinov	Integrable systems with spherical singularities (online)
14:40 – 15:20	Maria Przybylska	Non-integrability of planar elliptic restricted three body problems (online)
15:20 – 16:00	Sergei Tabachnikov	Cusps of caustics by reflection and Legendrian knots (online)
16:00 – 16:40	Phanindra Tallapragada	Dynamics of a class of simple mobile parametric oscillators (online)
02.12.2021 (Online)		
11:00 – 11:40	Mikhail Svinin	Multi-robot control strategies for monitoring a dynamically changing flood area (online)
11:40 – 12:20	Milena Radnovic	On asymptotics of Painleve transcendent (online)
12:20 – 13:00	Andrey Mironov	Commuting differential and difference operators (online)
13:00 – 14:00	Lunch	

14:00 – 14:40	Bozidar Jovanovic	Integrable maps on Stiefel manifolds (online)
14:40 – 15:20	Borislav Gajic	Magnetic Chaplygin systems and generalized Demchenko case (online)
15:20 – 16:00	Luigi Chierchia	KAM Tori in generic nearly-integrable Mechanical Systems (online)

03.12.2021 (Closing Ceremony)