Program
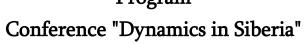
Conference "Dynamics in Siberia"

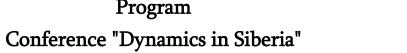| Monday, February 28	
9:00-09:50	Registration (Ground floor of the Sobolev Institute of Mathematics)
Plenary talks (Conference Hall of the Sobolev Institute of Mathematics)	
09:50-10:00	Opening.
10:00-10:50	V. Kozlov. *On the integrability of the equations of dynamics in a non-potential force field.*
11:00-11:50	V. Buchstaber. *Noncommutative Korteweg-de Vries hierarchy and the Novikov quantum equations.*
Coffee break (20 minutes)	
12:10-13:00	S. Gorchinskiy. *Gauss-Manin connection and higher local fields.*
CONFERENCE PHOTO	
Lunch (90 minutes)	

	Section *A* (Conference Hall)	Section B (417, Sobolev Institute of Mathematics)	Section C (213, Sobolev Institute of Mathematics)
14:30-15:00	N. Tyurin. *Constructing lagrangian submanifolds in algebraic varieties with toric action.*	S. Sokolov. *Integrable Cases of Vortex Dynamics.*	V. Kruglov. *The Morse-Smale flows on a surface with a finite number of moduli and their classification in sense of topological conjugacy.*
15:05-15:35	V. Przhiyalkovskiy. *Hodge level for weighted complete intersections.*	V. Shubin, S. Agapov. *Rational integrals of magnetic geodesic flows on 2-surfaces.*	E. Nozdrinova. E. Tsaplina. *Existence of a connected characteristic space of orbits for gradient-like diffeomorphisms on surfaces.*
15:40-16:10	A. Zheglov. *On some questions around Berest's conjecture.*	V. Kibkalo. *Topological properties of integrable tops in pseudo-Euclidean space.*	M. Barinova. *Energy function for 3-diffeomorphisms with basic sets of codimension 1.*
	Coffee break (20 minutes)		
16:30-17:00	I. Viygin. *Vector bundles and the Riemann–Hilbert problem on a Riemann surface.*	S. Pustovoytov. *Topological magnetic billiard. Oriented and non-oriented cases.*	S. Zinina. *Global dynamics of regular topological flows on manifolds.*
17:05-17:35	A. Golota. *Finite abelian subgroups in groups of birational automorphisms.*	S. Vasyutkin. *The operator of invariant differentiation and its action on the basis of the differential algebra of matrices.*	D. Baranov. *Knot as a complete invariant of diffeomorphisms of surfaces with three periodic orbits.*
17:40-18:10	A. Vikulova. *Smooth 1-Fano weighted complete intersections.*	T. Zvonareva. *Tensor train for solving the multi-parameter optimization problem for the diffusion-logistic model.*	D. Shubin. *Three-dimensional non-singular Morse-Smale flows with three periodic orbits.*

Section talks (Monday, February 28)

Program

Conference "Dynamics in Siberia"

Tuesday, March 1	
Plenary talks (Conference Hall of the Sobolev Institute of Mathematics)	
10:00-10:50	D. Treschev. *On isochronous dynamics.*
11:00-11:50	D. Orlov. *Geometric realizations of noncommutative varieties and phantoms.*
Coffee break (20 minutes)	
12:10-13:00	D. Kaledin. *Homotopy types and higher symmetries.*
Lunch (90 minutes)	

	Section talks (Tuesday, March 1)		
	Section A (Conference Hall)	Section B (417, Sobolev Institute of Mathematics)	Section C (213, Sobolev Institute of Mathematics)
14:30-15:00	M. Guzev. *Heat flux structure for orstein-uhlrnbeck particles of a one-dimensiomal harmonic chain.*	Yu. Kordukov. *Semiclassical trace formula for the Bochner-Schroedinger operator.*	N. Denisova. *On the topological classification of multidimensional polar flows.*
15:05-15:35	N. Kuznetsov. *M.V. Keldysh problem on the nonlinear analysis of flutter suppression models.*	D. Millionshikov. *N-graded Lie algebras as critical points.*	A. Dobralyubova. *On number of moduli for non-singular flows on S^2xS^1.*
15:40-16:10	M. Shishlenin. *Acoustic tomography: inverse problems and deep learning.*	A. Basalaev. *Berglund-Hubsch duality and Arnold's strange duality.*	E. Chilina. *On perturbations of nonhyperbolic automorphisms of the two-dimensional torus.*
	Coffee break (20 minutes)		
16:30-17:00	O. Krivorotko. *Mathematical modeling and forecasting of COVID-19 in Russian Federation regions, Kazakhstan Republic and UK.*	A. Orlov. *New solvable matrix integrals.*	E. Shustova. *Dynamics of direct products of diffeomorphisms.*
17:05-17:35	P. Akhmet'ev. *On the Melikhov colored finite type invariants.*	C. Shramov. *Cremona group over a finite field.*	A. Morozov. *Determination of the homotopy type of a Morse-Smale diffeomorphism on a surface by heteroclinic intersection.*
17:40-18:00	N. Chuesheva. *On the solvability of several non-linear equations of odd order.*		

Program

Conference "Dynamics in Siberia"

Wednesday, March 2 (Conference Hall of the Sobolev Institute of Mathematics)	
10:00-10:50	O. Pochinka. *Knot as a complete invariant of Morse-Smale diffeomorphisms on the 3-sphere.*
11:00-11:50	A. Glutsyuk. *On rationally integrable planar dual and projective billiards.*
	Coffee break (20 minutes)
12:10-13:00	I. Polekhin. *The Kapitza-Whitney Pendulum.*
	Cultural program

Thursday, March 3 (Conference Hall of the Sobolev Institute of Mathematics)	
10:00-10:50	A. Shafarevich. *Geometric Construction and Dynamics of Lagrangian Manifolds and Complex Vector Bundles Corresponding to Short-Wave Solutions of Hyperbolic Equations with Abruptly Varying Coefficients.*
11:00-11:50	A. Tsiganov. *Integrable metrics with higher order invariants on the sphere, ellipsoid and plane.*
	Coffee break and poster session (20 minutes)
12:10-13:00	A. Buryak. *An integrable system for the Gromov-Witten invariants of the elliptic curve.*
	Cultural program

Poster session:

G. Sharygin. *About the shift of argument in universal enveloping algebra.*

Friday, March 4 (Conference Hall of the Sobolev Institute of Mathematics)	
10:00-10:50	S. Dobrokhotov. *Constructive asymptotic solutions of nonlinear shallow Water equations in basins with gentle shores.*
11:00-11:50	S. Bolotin. *Crossing of a critical energy level in Hamiltonian systems with slow dependence on time.*
	Coffee break (20 minutes)
12:10-13:00	A. Popov. *Multidimensional gravity with higher derivatives.*
	Cultural program