

### **International Conference "Geometry Days in Novosibirsk - 2017"**



### Wednesday, September 20

9:00-10:00	Registration (Ground floor of the Sobolev Ir	nstitute of Mathematics)					
Plenary talks (conference hall)							
10:00-10:50	S.V. Matveev, TBA.						
10:50-11:40	G.Yu. Panina, Diagonal complexes.						
Coffee break (20 minutes)							
12:00-12:50	V.A. Sharafutdinov, Orthogonality relations for a stationary flow of ideal fluid.						
13:00	Conference photo						
	Lunch (100 minutes)						
		Sectional talks					
	Section A (Conference Hall)	Section B (room 417)	Section C (room 220)				
14:30-15:00	V.V. Przyjalkowski, On the Katzarkov-	V.V. Slavsky, The Kronrod-Reeb graph of a	E.A. Fominykh, <i>On complexity of 3-</i>				
	Kontsevich-Pantev conjectures.	conformally flat spline.	manifolds.				
15:05-15:35	D.V. Millionshchikov, Lie algebras of	A.D. Mednykh, Jacobians of circulant graphs and	A.V. Tetenov, On self-similar dendrites				
	slow growth and hyperbolic systems of PDE.	their generalisations.	in the plane.				
		Coffee break (25 minutes)					
16:00-16:20	D.N. Tyurin, Relative Milnor K-groups and	E.E. Skurikhin, Sheaf cohomology and dimensions of	A. Lightfoot, Vassiliev invariants				
	Kahler differentials.	categorical proximity spaces.	and link homotopy in dimension four.				
16:25-16:45	V.P. Golubyatnikov, On monodromy in the	M.B. Karmanova, On metric properties of	L.R. Nabeeva, On the proof of equivalence				
	Prony systems with near-colliding nodes.	classes of Hölder surfaces on nonholonomic structure	of certain tabulated				
			knots in the thickened Klein bottle.				
16:50-17:10	V.M. Gichev, On submanifolds of constant	K.V. Storozhuk, About fixed points of multivalued	I.K. Mai, Quazoids for knotoids.				
	width in higher codimensions.	mapping: analog of Bessaga Theorem.					
17:15-17:35	E.S. Kornev, Kähler and sublagrangian	Ya.A. Kopylov, Duality for Orlicz spaces of differentia	E.S. Kudina, Angles and edge lengths of				
	submanifolds.	forms.	a hyperbolic hexahedra with 3-				
			symmetry.				



## International Conference "Geometry Days in Novosibirsk – 2017" Thursday, September 21



	Plenary talks (conference hall)						
9:00-9:50	I.A. Panin, Multivalued algebraic mappings.						
9:50-10:40	E.A. Kudryavtseva, The topology of spaces of s	smooth functions with specified singularities on surfa	ices.				
	Coffee break (20 minutes)						
11:00-11:50	S.E. Stepanov, Spectral properties of the Tach	ibana operator on a complete Riemannian manifold.					
	Lunch (100 minutes)						
	Sectional talks						
	Section A (Conference Hall)	Section B (room 417)	Section C (room 220)				
13:30-14:00	V.A. Alexandrov, How many times can the volume of a convex polyhedron be increased by isometric deformations?	A.B. Zheglov, Amazing examples of nonrational smooth spectral surfaces.	V.V. Volchkov, Vit.V. Volchkov, Extremal problems of integral geometry.				
14:05-14:35	D. Slutskiy, On embeddings of non-positively curved compact surfaces in flat Lorentzian manifolds.	A.P. Kopylov, Quasi-isometric mappings and the p-moduli of path families.	I.A. Zubareva, On the Laplace spectra of some connected compact simple Lie groups of rank 4.				
		Coffee break (25 minutes)					
15:00-15:20	A.G. Megrabov, The geometrical aspects of the equivalence group and conservation laws for families of curves and surfaces.	A.G. Kachurovskii, Rates of convergence in the von Neumann ergodic theorem.	A.A. Kazhymurat, Lower estimates for the energy functional on a family of Hamiltonian-minimal Lagrangian tori in CP. <sup>2</sup>				
15:25-15:45		A.V. Greshnov, On the definition of the affine mappings in the Heisenberg group.	P.D. Andreev, On the similarity homogeneous R-trees.				
15:50-16:10	N.V. Abrosimov, On geometric structures on the figure-eight knot with a bridge.	A.A. Egorov, Integral estimates for solutions of differential relations constructed by quasiconvex functions and null Lagrangians.	D.N. Oskorbin, E.D. Rodionov, I.V. Ernst, On Ricci solitons on k-symmetric Lorentzian manifolds.				
16:15-16:35	D.S. Rozhkov, Cubed complexes and transformation groups of dimer coverings.	A.V. Levichev, On canonical intertwining operators in the multi-level model of quark-gluon media.	V.A. Kyrov, G.G. Mikhailichenko, Hypercomplex numbers in the geometry of two sets.				
16:40-17:00	K.G. Kamalutdinov, A.V. Tetenov, On some use of general position theorem for self-similar structures.		R.A. Bogdanova, V.A. Kyrov, G G. Mikhailichenko, <i>Groups of motions of some</i> phenomenologically symmetric three- dimensional geometries.				



## International Conference "Geometry Days in Novosibirsk - 2017"



### Friday, September 22

Plenary talks (conference hall)				
9:00-9:50	D.B. Kaledin, Witt vectors, commutative and non-commutative.			
9:50-10:40	A.V. Malyutin, Classifying Matveev's virtual 3-manifolds.			
Coffee break, POSTER SESSION (30 minutes)				
11:10-12:00	T.E. Panov, Manifolds defined by right-angled 3-dimensional polytopes.			
12:00-12:50	N.A. Tyurin, Manifolds of modules of special Bohr–Sommerfeld cycles for algebraic manifolds.			
	Lunch			
16:30	Excursion to the archaeological museum (starting at 16:00 from the Sobolev Institute of Mathematics)			
19:00	Conference dinner			

#### List of poster presentations:

- G.A. Abdikalikova, *On the finite-gap two-dimensional Schrödinger operator.*
- M.S. Ermentay, Minimal isotropic tori in CP<sup>3</sup>.
- G.S. Mauleshova, *One-point commuting difference operators and their connection with commuting differential operators.*
- E.V. Shumakova, Sufficient conditions for minimality of special spines with three 2-components.



# International Conference "Geometry Days in Novosibirsk – 2017" Saturday, September 23



Plenary talks (conference hall)				
10:00-10:50	V.N. Berestovsky, Geodesics and curvatures of special sub-Riemannian metrics on Lie group.			
10:50-11:40	V.P. Ilyin, Some problems and approaches of calculating geometry in mathematical modeling.			
	Coffee break (20 minutes)			
12:00-12:50	I.A. Dynnikov, Interval exchange transformations with integral linear restrictions on the parameters.			