International Conference

GEOMETRY, DIFFERENTIAL EQUATIONS and ANALYSIS

in memory of Aleksei Vasilyevich Pogorelov for his 100th birthday anniversary 17–21 June, 2019, Kharkiv, Ukraine

Registration, opening and all talks will take place at the V.N. Karazin National University, 4 Svobody Sq. (subway station "Universytet"), 6-th floor.

| Monday 17.06 (room 6-52) | Tuesday 18.06 (room 6-49) | Wednesday 19.06 (room 6-49) | Thursday 20.06 (room 6-49) | Friday 21.06 (room 6-49) |
|--|--|---|---|--|
| 9:00-10:00 Registration (Hall by room 6-52) 10:00 - 10:20 Opening ceremony | 10:00-10:40 I.Sabitov Manifolds and surfaces with locally Euclidean metrics | 10:00-10:40 A.Borbely Bounded harmonic functions on negatively curved manifolds | 10:00-10:40 Y.Nikonorov Recent results on homogeneous geodesics and geodesic orbit spaces | 10:00-10:20 K.Tatarko A Steiner formula in the L _p Brunn Minkowski problem |
| 10:20-11:10 V.Milman Flowers and Reciprocity in Convex Geometry | | | | 10.25-10.45 S.Myroshnichenko On recognizing shapes of bodies from their shadows |
| 11:15-11:55 A.Eremenko Metrics of constant positive curvature with conic singularities | 10:45-11:25 Y.Nikolayevsky On cylindricity of submanifolds of nonnegative Ricci curvature in a Minkowski | 10:45-11:25 N.Nadirashvili Isoperimetric inequalities for spectrum of Laplacian on surfaces | 10:45-11:25 W.Klingenberg On a conjecture of Toponogov on complete convex surfaces | 10:50-11:10 A.Yampolsky Projective classification of points of a submanifold F^3 in E^6 |
| | space | on surfaces | | 11:15-11:35 D.Sukhorebska Full classification of simple closed geodesics on regular tetrahedra in Lobachevsky space |
| 12:00 - 12:30 Coffee break | 11:30 - 12:00 Coffee break | 11:30 - 12:00 Coffee break | 11:30 - 12:00 Coffee break | 11:40-12:00 Coffee break |
| (room 6-50) | (room 6-50) | (room 6-50) | (room 6-50) | (room 6-50) |

| 12:30 - 13:10 V.Miquel The volume preserving mean curvature flow in the sphere and the Lagrangian mean curvature flow in C2 | 12:00-12:40 N.Krylov About Aleksandrov's estimates | 12:00 - 12:40 M.Sodin Laplacian eigenfunctions with a level set having infinitely many connected components | 12:00 - 12:40 V.Yaskin On Gruenbaum-type inequalities and their applications | 12:00-12:20 S.Ignatovich Surfaces of maximal singularity for homogeneous control systems 12:25-12:45 K.Khalina On reachability and controllability problems for the heat equation controlled by the Neumann |
|--|---|---|--|--|
| 13.15-13.55 E.Musso. Cauchy-Riemann geometry of Legendrian knots in the 3-dimensional sphere. | 12:45 - 13:25 S.Kuksin Rigorous theory of 1d turbulence | 12:45-13:25 POSTER SESSION (Hall by room 6-52) | 12.45 - 13.25 A.Mironov Algebraic nonintegrability of magnetic billiards on the sphere and hyperbolic plane | 12:50-13:20 S.Zagorodnyuk On the truncated two-dimensional moment problem 13:25-13:45 A.Piven One-point initial problem for a nonhomogeneous linear differential-difference equation in a Banach space |
| 14:00-15:30 Dinner | 13:30-15:00 Dinner | 13:30-15:00 Dinner | 13:30-15:00 Dinner | 13.50 -14.00 Closing ceremony |

| 15:30-15:50 | 15:00-15:20 | | 15:00-15:20 |
|---|--|-----------------------------------|---|
| K.Drach On the reverse isoperimetric problem for uniformly convex bodies | D.Ryabogin On a local version of the fifth Busemann-Petty problem | | A.Pampano Solutions of the Ermakov-Milne-Pinney equation and invariant constant mean curvature surfaces |
| 15:55-16:15 G.Livshyts Are log-concave measures better than log-concave with symmetry? 16:20-16:40 Y.Aminov Action of the Monge-Ampere operator on polynomials | 15:25-15:45 A.Prymak On illumination of the boundary of a convex body in En, n=4,5,6. 15:50-16:10 M.Poplavskyi On the persistence probability for Kac polynomials, random walks and random matrices | | 15:25-15:45 A.Lytova On delocalization of eigenvectors of random non-Hermitian matrices 15:50-16:10 A.Rashkovskii Geodesic interpolation of weighted extremal functions |
| 16:45-17:10 Coffee break (room 6-50) 17:10-17.30 I.Afanasiev On the correlation functions of the characteristic polynomials of the non- Hermitian random matrices | 16:15-16:45 Coffee break (room 6-50) 16:50 - 17.10 S. Boldt The Height Of Compact Nonsingular Heisenberg-like Nilmanifolds | 15:00-17:00 Excursion | 16:15-16:45 Coffee break (room 6-50) 16:50-17:10 S.Maksymenko Diffeomorphisms preseriving Morse-Bott functions |
| vith independent entries 17:35-17:55 V.Mogilevskii Couplings of symmetric operators with possibly unequal and infinite deficiency indices | 17:15-17:35 D.Bolotov On PL-embeddings S2 into E4 17:40-18:00 E.Sevost'yanov On global behavior of Sobolev and Orlicz- Sobolev classes in terms of prime ends | | 17:15-17:35 A.Kravchenko Automorphisms of the Kronrod-Reeb graph of Morse functions on the sphere 17:40-18:00 O.Khohliyk Diffeomorphisms of the solid torus preserving a codimension one Morse-Bott foliation with one singular circle |
| 18.00 Welcom Party | | 17:00 Conference dinner | |

Poster Session

O. Hukalov, V. Gordevskyy Some approximate solutions of the Bryan-Pidduck equation

S.Pokas, A.Krutoholova Infinitesimal conformal transformations of the second degree in the Riemannian space of the

second approximation

K. Stiepanova, V. Gorkavyy Helical tractrices and pseudo-spherical submanifolds in \mathbb{R}^n

R. Posylaieva, V. Gorkavyy One integral inequality for curvatures of closed curves in R^n

V. Gorkavyy Around model flexors

V. Korobov, T. Revina The envelope for a family of ellipsoids in the controllability function method

T.V. Revina, H.A. Samoilenko Nested ellipsoids

I. Kuznietsova, Yu. Soroka First Betti numbers of orbits of Morse functions on surfaces

A. Kheifets, P. Yuditskii Hardy Spaces of Fuchsian Groups in the Upper Half-plane

V.O. Makarichev, I.V. Brysina On some applications of atomic functions and their generalizations

Ye.A. Yevgenieva Propagation of singularities for solutions of quasilinear parabolic equations with absorption term

D.Y. Bobyliev Theoretically investigating the loss of stability and supercritical behaviour of a thin-walled shell

T. Pernata Long-time behaviour of a thermoelastic Bresse system