

**V International Conference
ANALYSIS AND MATHEMATICAL PHYSICS
19-24 June, 2017, Kharkiv, Ukraine**

Registration, opening and all talks will take place at B.Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine,
47 Nauki Avenue (subway station "23 Serpnia")

Monday, June 19, 2017

09:00-10:00	Registration (ILTPE main hall)	
10:00-10:05	Conference opening ceremony (ILTPE conference hall)	
10:05-10:10	Sergey Gnatchenko	
10:10-10:15	Vil Bakirov	
Morning session (ILTPE conference hall), chairman – Leonid Pastur		
10:15-10:55	Barry Simon	Spectral theory sum rules, meromorphic Herglotz functions and large deviations
10:55-11:15	Coffee break	
11:15-11:55	Vitali Milman	"Irrational" convexity
11:55-13:30	Lunch	
Afternoon session (ILTPE conference hall), chairman – Maria Shcherbina		
13:30-14:00	Poster session (ILTPE main hall)	
14:00-14:40	Alexandr Aptekarev	The Steklov problem and estimates for orthogonal polynomials
14:40-15:20	Andrey Shkalikov	PT-Symmetric Operators with Parameter. Critical parameter values
15:20-15:40	Coffee break	
15:40-16:20	Sergey Dobrokhotov	Asymptotic solutions to 2-D linear wave equation with degenerated velocity, Fock quantization of canonical transforms and the run-up problem in the framework of shallow water models
16:20-17:00	Alexander Bufetov	Conditional measures of determinantal point processes: the Gibbs property and the Lyons-Peres conjecture

Monday, June 19, 2017, 13:30-14:00

Poster session (ILTPE main hall)

1.	Andreiev, Kyrylo	The Korteweg–de Vries equation with steplike initial data as a Hamiltonian system
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2.	Arshava, Elena	On a class of equations with a difference kernel on a finite interval
3.	Barkhayev, Pavel	Exact null controllability and complete stabilizability of neutral type systems
4.	Bebiya, Maxim	Stabilizability and controllability of singular triangular systems
5.	Egorova, Iryna	Long time asymptotics for the Korteweg - de Vries equation with steplike initial data
6.	Fardigola, Larissa	Transformation operators and wave equations
7.	Fastovska, Tamara	Rational decay rates of solutions to some fluid-structure interaction models
8.	Favorov, Sergii	Large Fourier Quasicrystals
9.	Feldman, Gennadiy	Characterization theorems for Q -independent random variables with values in a locally compact Abelian group
10.	Filipkovska, Maria	Mixed initial-boundary value problem for nonlinear Maxwell-Bloch equations and Riemann-Hilbert problems
11.	Golinskii, Leonid	On stability in the Borg-Hochstadt theorem for periodic Jacobi matrices
12.	Goncharuk, Anna	The generalized backward shift operator on $Z[[x]]$, Cramer's formulas for solving infinite linear systems, and p -adic integers
13.	Karpenko, Iryna	On the Pochhammer transformation and sign-independently hyperbolic polynomials
14.	Khilkova, Larysa	Homogenization of the diffusion equation in domains with the fine-grained boundary with the nonlinear boundary Robin condition
15.	Khrabustovskyi, Volodymyr	On the difference equations with operator coefficients containing spectral parameter nonlinearly
16.	Klimovsky, Anton	High-dimensional Gaussian fields with isotropic increments seen through spin glasses
17.	Korobov, Valerii	On the min-moment problem and the controllability function in completely controllable systems
18.	Kostenko, Oleksii	The boundary equations of the diffraction problem of oblique incidence electromagnetic waves on a periodic impedance lattice
19.	Kotlyarov, Volodymyr	A Matrix Baker-Akhiezer function associated with the Maxwell-Bloch equations
20.	Kushnir, Roman Protsyuk, Borys Horun, Oleh	Nonlinear nonstationary heat conduction problems for a three-components bodies
21.	Makarichev, Victor	Approximation of periodic functions by generalized Fup-functions
22.	Marchenko, Vitalii	Stability criterion for C_0 -semigroups
23.	Mogilevskii, Vadim	Pseudospectral functions of symmetric systems with the maximal deficiency index
24.	Myronyuk, Margaryta	On the Skitovich-Darmois theorem for the group of p -adic numbers
25.	Nessonov, Nikolay	The actions of the full symmetric group on von Neumann algebras
26.	Obikhod, Tetiana	The study of solitonic objects of the D-brane type by application of topological invariants
27.	Revina, Tetiana	On the feedback synthesis problem for one robust oscillating system

28.	Rybalko, Yan	Long time asymptotics for the nonlocal nonlinear Schrodinger equation on the line
29.	Shepelsky, Dmitry	A direct approach to the inverse scattering transform for the short pulse equation
30.	Sinel'shchikov, Sergey	Classification of symmetries of the quantum disc
31.	Uvarov, Dmitriy	Classically integrable models of massless particle and D0-brane on $AdS_4 \times \mathbb{CP}^3$ superbackground
32.	Veliev, Oktay	Spectral analysis of the Schrodinger operator with a periodic PT-symmetric potential
33.	Zhaba, Viktor	Analytical forms of deuteron wave function
34.	Zuieva, Tetiana	Dissipative model of vortex motion in the rotation Bose-Einstein condensate

Tuesday, June 20, 2017

09:00-09:30	Registration (ILTPE main hall)	
Morning session (ILTPE conference hall), chairman – Eugen Khruslov		
09:30-10:10	Philippe Loubaton	On the almost sure location of the singular values of certain Gaussian block-Hankel large random matrices
10:10-10:30	Coffee break	
10:30-11:10	Alexander Fedotov	Stark-Wannier resonances and cubic exponential sums
11:10-11:50	Leonid Berlyand	Phase field and free boundary models of cell motility
11:50-14:00	Lunch	
Afternoon session (ILTPE conference hall), chairman – Dmitry Shepelsky		
14:00-14:40	Ricardo Weder	Direct and inverse scattering theory for the matrix Schrödinger operator on the half line with the general selfadjoint boundary condition
14:40-15:20	Hans-Dieter Alber	Phase field models for material interfaces – the regularizing effect of interface energy
15:20-15:40	Coffee break	
15:40-16:20	Shinichi Kotani	Determinantal formula of inverse spectral problem for Schrödinger operators and its application to KdV flow
16:20-17:00	Igor Krasovsky	Central spectral gaps of the almost Mathieu operator
17:30	Get Together Party - Conference dinner	

Wednesday, June 21, 2017

Morning session (Conference hall of the Mathematical Department, biological building, 2 floor, room 213),
chairman – Anatoly Nikitin

09:30-10:10	Mikhail Sodin	Spectra of stationary processes on Z
10:10-10:30	Coffee break	
10:30-11:10	Gerald Teschl	Jacobi polynomials, Bernstein-type inequalities and dispersion estimates for the discrete laguerre operator
11:10-11:50	Yurii Lyubarskii	Discrete Multichannel Scattering with step-like potential
11:50-14:00	Lunch	
Afternoon session (Conference hall of the Mathematical Department, biological building, 2 floor, room 213), chairman – Mikhail Sodin		
14:00-14:40	Volodymyr Pelykh	Exact solutions of Maxwell equations in Kerr space-time and their physical manifestations
14:40-15:20	Sasha Sodin	The distribution of ζ'/ζ about a random point on the critical line
15:20-15:40	Coffee break	
15:40-16:20	Anatoly Nikitin	Symmetries, supersymmetries and integrability of quantum mechanical systems
16:20-17:00	Mihail Poplavskiy	On the distribution of the largest real eigenvalue for the real Ginibre ensemble

Thursday, June 22, 2017

Morning session (Conference hall of the Mathematical Department, biological building, 2 floor, room 213),
chairman – Leonid Golinskii

09:30-10:10	Alexander Its	The Riemann-Hilbert Approach to Random Matrices
10:10-10:30	Coffee break	
10:30-11:10	Alexandre Eremenko	Real solutions of Painleve VI equation and circular pentagons
11:10-11:50	Eugenia Malinnikova	Sharp uniqueness results for discrete Schrodinger evolutions
11:50-14:00	Lunch	

Afternoon session (Conference hall of the Mathematical Department, biological building, 2 floor, room 213),
chairman – Alexander Its

14:00-14:40	Svitlana Mayboroda	The hidden landscape of localization of eigenfunctions
14:40-15:00	Coffee break	
15:00-15:40	Thomas Kapeller	On the wellposedness of integrable PDEs: a survey of new results for the KdV, KdV2, and mKdV equations
15:40-16:20	Anna Lytova	Phase transition for the variance of the ℓ_p^n -norm of the Gaussian vector and Dvoretzky's theorem

Friday, June 23, 2017

Morning session (Conference hall of the Mathematical Department, biological building, 2 floor, room 213),
chairman – Alexandre Eremenko

09:30-10:10	Sergei Kuksin	Small-amplitude solutions for space-multidimensional Hamiltonian PDEs under periodic boundary conditions
10:10-10:50	Andrii Khrabustovskyi	Homogenization in domain with holes revisited
10:50-11:10	Coffee break	
11:10-11:50	Alexander Sakhnovich	Explicit solutions of inverse problems and of dynamical systems
11:50-12:30	Alexander Minakov	Laguerre polynomials in asymptotics of the modified Korteweg-de Vries equation