XI-th International Conference
"SOLITONS, COLLAPSES AND TURBULENCE: Achievements, Developments and Perspectives"

1-5 July, 2024, Belgrade
The programme is written in Belgrade time (GMT+2)

1 Monday, 1.7.2024

	Plenary talks
09:00–09:50	**Registration**
09:50–10:00	Conference opening: Greetings
10:00–10:45	E. Kuznetsov, "Formation of magnetic filaments in convective zone of the Sun"
10:45–11:15	**Coffee break**
11:15–12:00	F. Calogero, "TBA" **(online)**
12:00–12:45	A. Mikhailov, "TBA"
12:45–14:00	**Lunch break**

	Section: Nonlinear Phenomena
14:00–14:30	L. Piterbarg, "Caustic frequency in 2D stochastic flows modeling turbulence"
14:30–15:00	N.M. Zubarev "Effect of viscosity on the self-similar growth of conic cusps on the surface of a conducting liquid in an electric field" **(online)**
15:00–15:30	V. Geogjaev, "Coupling Coefficient for 4-wave interactions: properties and asymptotics"
15:30–16:00	S. Badulin, "Self-similarity of wind-driven seas in action"
16:00–16:30	**Coffee break**
16:30–17:00	P. Pezzutto, "Reduced Hamiltonian equations for gravity waves in a big box"
17:00–17:30	V.V. Yankov, "Arnold's hierarchy of attractors and the centuries-old dispute between geometers and algebraists" **(online)**

	Section: Solitons
14:00–14:30	P. Grinevich, "Almost degenerate Riemann surfaces in the theory of rogue waves"
14:30–15:00	V. Pukhnachev, "Generelized helical flows" online
15:00–15:30	G. Grahovski, "On the N-wave hierarchy with constant boundary conditions"
15:30–16:00	A. Kamchatnov, "TBA" **(online)**
16:00–16:30	**Coffee break**
16:30–17:00	S. Dremov, "Bi-solitons on the surface of a deep fluid: an inverse scattering transform perspective based on perturbation theory"
17:00–17:30	I. Chekhovskoy, "Numerical methods for the direct and inverse Zakharov-Shabat problem"
17:30–18:00	O. Alekseev, "Universality of stochastic Laplacian growth"

18:00-18:45	**Poster session**
	- A. Orlov, "Integrable Systems and Random Matrices. A Review." - G. Patrin, "Fast Exponential Splitting Schemes for the direct Nonlinear Fourier Transform" - E. Sedov, "Nonlinear Fourier Transform for Continuous Signal Processing: Novel Windowing Approach" - B. Semisalov, "Simulation of non-linear wave interactions in a random fibre laser"

19:00	**Welcome party**

2 Tuesday, 2.7.2024

	Plenary talks
09:00–09:45	S. Turitsyn, "Nonlinear photonics meets machine learning"
09:45–10:30	S. Nazarenko, "Universal scalings in stationary and evolving wave turbulence"
10:30–11:15	A. Newell, "Order parameter equations for patterns" **(online)**
11:15–11:45	**Coffee break**

	Section: Nonlinear Phenomena
11:45–12:15	P. Santini, "Periodic anomalous (rogue) waves in the $2+1$ dimensional Davey-Stewartson 2 equation"
12:15–12:45	A. Maluckov, "Nonlinear signatures of band topology: the role of modulation instability"

	Section: Solitons
11:45–12:15	A. Gelash, "Stochastization of condensate solitons"
12:15–12:45	D. Cevizovic, "Solitons in Flux-qubit based superconducting quantum metamaterial"

12:45–14:00	**Lunch break**

	Section: Nonlinear Phenomena
14:00–14:30	S. Vergeles, "Absorption of inertial waves by shear flow
14:30–15:00	A. Pushkarev, "Self-similarity and nonlinear resilience of wind-driven seas"
15:00–15:30	A. Kochetov, "The numerical simulations of reflection index dynamics of incident radio wave coursed by an electromagnetically driven Langmuir turbulence in a smoothly inhomogeneous plasma layer"
15:30–16:00	G. Gligorić, "Topologically protected modes in nonlinear distorted bipartite hexagonal photonic lattice"
16:00–16:30	**Coffee break**
16:30–17:00	L. Zhang, "TBA"
17:00–17:30	NM. Vucelja, "The growth rate of density inhomogeneities in weak turbulence from information theory perspective"

	Section: Solitons
14:00–14:30	V. Gerdjikov, "Riemann–Hilbert Problems, Lax Pairs and Integrable Equations"
14:30–15:00	S. Roudenko, "Soliton Stability and Stable Collapse in the NLS and KdV-type equations"
15:00–15:30	S. Nikolic, "Rogue wave clusters of the quintic nonlinear Schrodinger equation composed of Akhmediev breathers and Kuznetsov-Ma solitons"
15:30–16:00	A. Chernyavsky, "Dark-bright soliton perturbation theory for the Manakov system"
16:00–16:30	**Coffee break**
16:30–17:00	M. Lazarova, "TBA"
17:00–17:30	A. Pogrebkov, "Integrable hierarchies with negative times" **(online)**

3 Wednesday, 3.7.2024

09:00–09:45	**Plenary talks** P. Lushnikov, "Exact solution and integrability of ballistic motion of fluid with free surface"
09:45–10:30	Luc Bergé, "From optical wave collapse to plasma-driven terahertz pulse generation: Theory and applications"
10:30–11:15	Boris Lukyanchuk, "From wave turbulence to ocean mixing: observations and theory of the forward energy cascade"
11:15–11:45	**Coffee break**

	Section: Nonlinear Phenomena
11:45–12:15	Yu. Lvov, "From wave turbulence to ocean mixing: observations and theory of the forward energy cascade"
12:15–12:45	A. Korotkevich, "Kolmogorov–Zakharov spectrum of turbulence of capillary waves for finite systems"

	Section: Solitons
11:45–12:15	A. Aceves "Optical solitons in the presence of quartic dispersion"
12:15–12:45	B. Konopelchenko, "Geometry and integrability. TED equations and Kahler manifolds"

12:45–14:00	**Lunch break**

14:30	**Cultural Programme: Excursion**

19:00	**Conference dinner**
	Greetings: G. Fridman, V. Kontorovich etc. **(online)**

4 Thursday, 4.7.2024

09:45–10:30	**Plenary talks** G. Falkovich, "Renormalization of weak turbulence into strong"

	Section: Nonlinear Phenomena
10:30–11:00	N. Vladimirova, "Evolution of precondensate and vortices in two-dimensional Gross-Pitaevskii turbulence"

	Section: Solitons
10:30–11:00	M. Todorov, "Dynamics of Bright Soliton Solutions of System of Coupled Nonlinear Schrödinger Equations" **(online)**

11:00–11:30	**Coffee break**

	Section: Nonlinear Phenomena
11:30–12:00	D. Skryabin, "Multimode and multioctave chi(2) optics in microresonators"
12:00–12:30	A. Balaz, "Effects of quantum depletion and gradient corrections on the emergence of droplets in dipolar condensates"

	Section: Solitons and Collapses
11:30–12:00	D. Agafontsev, "Multi-soliton interactions as a mechanism for the emergence of rogue waves"
12:00–12:30	V. Shrira, "Collapses in 3-D free-surface boundary layers"

12:30–14:00	**Lunch break**

	Section: Turbulence
14:00–14:30	S. Annenkov, "Wave kinetics with the account for finite non-Gaussianity"
14:30–15:00	E. Kochurin, "3D Acoustic Turbulence: Random Shocks or Weak Turbulence?"
15:00–15:30	A. Gainer, "Discreteness and local field effects in classical molecular optics Nonlinear and anisotropic media"
15:30–16:00	

	Section: Solitons
14:00–14:30	R. Conte, "The 11 and only 11 meromorphic solutions of CGL3 and CGL5"
14:30–15:00	N. Petrović, "Solitary and traveling wave solutions to the Nonlinear Schrödinger equation describing quantum droplets"
15:00–15:30	A. Orlov, "Sato approach and $\bar{\partial}$-problem method. Massless and massive fermions"
15:30–16:00	Y. Zhao, "TBA"

16:00–16:30	**Coffee break**

	Student & young scientist Section
16:30–16:50	S. Bogdanov, "Nonlinear Fourier transform for finite-genus solutions of a generic type: application in fibre-optic communications"
16:50–17:10	S. Gundogdu, "TBA"
17:10–17:30	

5 Friday, 5.7.2024

	Plenary talks
09:00–09:45	V. Lvov, "Nonlinear theory of kinetic instability and Bose-Einstein condensate of magnons"
09:45–10:30	Miguel Onorato, "TBA"

	Section: Nonlinear Phenomena
10:30–11:00	S. Flach, "Thermalization slowing down for weakly nonintegrable many-body dynamics"

	Section: Solitons
10:30–11:00	Konstantinou-Rizos, "Soliton solutions of an integrable discretisation of the NLS equation"

11:00–11:30	**Coffee break**

	Section: Nonlinear Phenomena
11:30–12:00	
12:00–12:30	V. Efimov, "Problems of quantum turbulence on accumulation of ultra-cold neutrons in modern installation." **(online)**

	Section: Solitons
11:30–12:00	A. Kazakov, "The black box problem for electrical networks and the geometry of non-negative Grassmannian"
12:00–12:30	M. Mazur, "Is the outcome of a single quantum measurement truly unpredictable? The role of nonlinearity in the measurement process"

12:30–14:00	**Lunch break**

	Section: Nonlinear Phenomena
14:00–14:30	N. Zolnikova, "Reflectionless resonance tunneling of electromagnetic wave in nonuniform plasma"
14:30–15:00	Y. Kati, "Disordered Kuramoto Network in the Asynchronous State"
15:00–15:30	T. Vrećica, "On the nonlinear water wave properties in coastal and deep waters"
15:30–16:00	E. Kuznetsov, "A.V. Zakharov, V.E. Zakharov: Why rich people become richer"

16:00–16:30	**Coffee break**