

# Program

Sunday, September 7

	NWP-1 Nonlinear Dynamics and Machine Learning	NWP-2 High-Power Lasers and Applications	NWP-3 Nonlinear Phenomena in the Atmosphere and Ocean
<b>Chairs</b>	<b>Stefano Boccaletti (Italy)</b> <b>Vladimir Nekorkin (Russia)</b>	<b>Efim Khazanov (Russia)</b> <b>Jianda Shao (China)</b>	<b>Evgeny Mareev (Russia)</b>
	<b>IX Scientific School “Dynamics of Complex Networks and their Applications” (DCNA'2025)</b> <b>Russian-Chinese Workshop “Ultra Intense Laser Technology and Intense Field Physics”</b>		
<b>9:30-12:30</b>	<b>Registration of participants</b>		
<b>12:30</b>	<b>Departure from Moscow</b>		
<b>13:30-15:00</b>	<b>Lunch</b>		
<b>15:00</b>	<b>Opening session (HALL A)</b>		
<b>15:30-17:30</b>	<b>Plenary session</b>		
<b>15:30-16:10</b>	<b>Evgenii Kuznetsov (Russia)</b> . Symmetry approach to the problem of the gas expansion into a vacuum		
<b>16:10-16:50</b>	<b>Jianda Shao (China)</b> . Research progress and future prospect of AI+laser at SIOM		
<b>16:50-17:30</b>	<b>Alexander Khain (Israel)</b> . Toroidal vortices: their effects on dynamics and microphysics of cumulus clouds		
<b>17:30-18:00</b>	<b>Coffee break</b>		
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Complex dynamics of oscillatory systems</b>	<b>Ultra-intense laser technology and intense field physics. Session 1</b>	<b>Climate. Session 1</b>
<b>18:00-19:40</b>	<b>V. Nekorkin</b> . Biologically inspired neural networks based on adaptive Kuramoto model with higher-order interactions (Invited, 30 min)	<b>M. Starodubtsev</b> . XCELS-100 Project (Invited, 30 min)	<b>S. Kravtsov</b> . Emulation and S2S probabilistic prediction of 2-M temperature and precipitation over the global domain using linear inverse modeling (Invited, 30 min)
	<b>A. Kazakov</b> . Robust chaos in the generalized Kuramoto model (Invited, 30 min)	<b>S. Liu</b> . Application of artificial intelligence in optical testing (Invited, 30 min)	<b>D. Kondrashov</b> . Advancing predictive understanding of summer Arctic Sea ice (Invited, 30 min)
	<b>J. Zhu</b> . Phase dynamics of noise-induced coherent oscillators (Invited, 30 min)	<b>A. Shaykin</b> . 3PW OPCPA PEARL facility (Invited, 30 min)	<b>N. Iakovlev</b> . The understanding of the Arctic Ocean hydro- and sea ice dynamics: Multiscale physics and numerical modeling (Invited, 30 min)
<b>20:00-21:00</b>	<b>Dinner</b>		
<b>21:30</b>	<b>Welcome party</b>		

Monday, September 8

<b>8:00-9:00</b>	<b>Breakfast</b>		
	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Novel approaches and applications in machine learning. Session 1</b>	<b>Ultra-intense laser technology and intense field physics. Session 2</b>	<b>Ocean</b>
<b>9:00-11:20</b>	<b>I. Oseledets.</b> Artificial intelligence in science (A14Science): perspectives and challenges. (Invited, 30 min)	<b>E. Khazanov.</b> Impact of small-scale obscuration, surface roughness and reflectivity fluctuations of diffraction gratings on the temporal contrast of a femtosecond pulse (Invited, 30 min)	<b>S. Badulin.</b> Anisotropic weakly turbulent spectra of ocean swell: Analytical results and simulations (Invited, 30 min)
	<b>E. Muravleva.</b> Neural network models for forward and inverse problems in modeling (Invited, 30 min)	<b>Y. Jin.</b> Fabrication and application of surface relief gratings (Invited, 30 min)	<b>V. Geogjaev.</b> On anisotropic Kolmogorov spectra for deep water surface waves (Invited, 30 min)
	<b>A. Ossadtchi.</b> Interpreting brain activity with nonlinear and neural network based models (Invited, 30 min)	<b>S. Mironov.</b> Filtering spatial noise in a diffraction grating compressor to suppress small-scale self-focusing at post-compression stage (Invited, 30 min)	<b>V. Zhmur.</b> Behavior modes of a quasi-geostrophic ellipsoidal vortex in a horizontal flow with vertical shear (Invited, 30 min)
	<b>M. Kiselev.</b> Numeric model of spiking neural network CoLaNET learning process (Invited, 30 min)	<b>F. Wu.</b> Ultrahigh peak power femtosecond laser pulse compression methods (20 min)	
	<b>A. Emelianova.</b> A novel reservoir computing model: self-organized criticality, adaptivity and higher-order interactions (20 min)	<b>I. Yakovlev.</b> Ultrashort-pulse stretcher for XCELS laser complex prototype ( 20 min)	
<b>11:30</b>	<b>Arrival at Uglich</b>		
<b>11:30-14:00</b>	<b>Excursion</b>		
<b>14:30</b>	<b>Departure from Uglich</b>		
<b>14:30-16:00</b>	<b>Lunch</b>		
<b>16:30-17:50</b>	<b>Plenary session</b>		
<b>16:30-17:10</b>	<b>Alexander Hramov</b> (Russia). AI and network theory approaches for studying and diagnosing brain disorders		
<b>17:10-17:50</b>	<b>Alexander Feigin</b> (Russia). The role of nonlinear processes in observed climate evolution		
<b>17:50-18:10</b>	<b>Coffee break</b>		

	NWP-1	NWP-2	NWP-3
	Novel approaches and applications in machine learning. Session 2	Ultra-intense laser technology and intense field physics. Session 3	Climate. Session 2
18:10-19:30	<b>V. Vanovski.</b> AI technologies for modelling complex physical processes. Case of self-supervised computational graph coarsening (Invited, 30 min)	<b>P. Zhu.</b> Advanced direct drive laser facility in national laboratory on high power laser and physics (20 min)	<b>A. Seleznev.</b> Revealing evolution of ENSO in a changing climate: Data-driven dynamical systems approach (Invited, 30 min)
	<b>K. Stoyanova.</b> Machine learning in the assessment of the nomological organization of traits (Invited, 30 min)	<b>D. Silin.</b> Problems of high-precision measurements of wide-aperture aspherical optics (20 min)	<b>A. Kozlov.</b> Evaluation of regional climate simulations over the Northern Eurasia using a new land surface model (20 min)
	<b>A. Kuc.</b> Application of machine learning and long-range temporal correlations in EEG for the diagnosis of focal epilepsy (20 min)	<b>Q. Lu.</b> Interferogram-free adaptive wavefront interferometry: Fourier spot analysis (20 min)	
19:30-20:30	Dinner		
21:00-22:00	Concert		

**Tuesday, September 9**

8:00-9:00	Breakfast		
	NWP-1	NWP-2	NWP-3
	Complex dynamical networks. Session 1	Ultra-intense laser technology and intense field physics. Session 4	Climate. Session 3
9:00-10:30	<b>S. Kashchenko.</b> Dynamics of chains of coupled systems with a large number of elements (Invited, 30 min)	<b>Y. Wang.</b> Research on broadband high damage threshold ultrafast laser coatings (Invited, 30 min)	<b>D. Mukhin.</b> Data-driven methods for studying nonlinear climate phenomena (Invited, 30 min)
	<b>D. Goldobin.</b> Macroscopic self-organization of recurrent synaptic networks beyond the diffusion approximation (Invited, 30 min)	<b>I. Mukhin.</b> High aperture active mirror disk laser head for 10 J and 10 Hz laser amplifier (Invited, 30 min)	<b>E. Loskutov.</b> Improving the predictability of the climatic dynamics of the characteristics of the tropical basin of the Pacific and Indian Oceans using joint empirical models (Invited, 30 min)
	<b>L. Smirnov.</b> Dynamics of large oscillator ensembles with random interactions (Invited, 30 min)	<b>M. Sun.</b> New configurations on high efficiency and ultra-broadband optical parametric amplification (20 min)	<b>R. Samoilov.</b> Identification of Seasonally Dependent Atmospheric Circulation Regimes with Non-Homogeneous Hidden Markov Model (20 min)
10:30	Arrival at Goritsy		
10:30-13:20	Excursion		
13:30	Departure from Goritsy		
13:30-15:00	Lunch		

	NWP-1	NWP-2	NWP-3
	Complex dynamical networks. Session 2	Ultra-intense laser technology and intense field physics. Session 5	Atmosphere. Session 1
15:00-17:30	<b>G. Strelkova.</b> Beneficial role of noise in the dynamics of complex networks: chimera resonance (Invited, 30 min)	<b>A. Soloviev.</b> Dipole focusing of exawatt laser radiation: An experimental way to the theoretical limit (Invited, 30 min)	<b>O. Chkhetiani.</b> Wave-vortex interactions in geophysical flows (Invited, 30 min)
	<b>T. Vadivasova.</b> Effects of coupling and noise in networks of excitable FitzHugh – Nagumo neurons (Invited, 30 min)	<b>Y. Cheng.</b> Design, fabrication and performance study of the all-solid anti-resonant fiber (20 min)	<b>E. Malinovskaya.</b> Convective and electrostatic structures in dust aerosol emission (20 min)
	<b>V. Ponomarenko.</b> Image recognition using a small spiking neural network (Invited, 30 min)	<b>I. Kuzhetsov.</b> High-power multichannel Yb:YAG laser with coherent beam combining (20 min)	<b>N. Vazaeva.</b> On the universality of squall statistics: self-similarity and turbulent features (20 min)
	<b>V. Semenov.</b> Control of deterministic and stochastic wavefront propagation for networks of bistable oscillators (Invited, 30 min)	<b>X. Li.</b> Luminescence behavior and structural relationship of bismuth doped silica glasses and fibers (20 min)	<b>A. Khain.</b> Are the mechanisms responsible for the formation of cumulus cloud fields well understood? (Invited, 30 min)
	<b>N. Semenova.</b> The impact of internal noise on deep and spiking neural networks (Invited, 30 min)	<b>K. Burdonov.</b> Recent progress in development of a low-power multi-beam coherent combining system prototype for the XCELS project (20 min)	<b>K. Rubinstein.</b> Nonlinear response of the atmospheric transport model to meteorological forecast uncertainties (10 min)
15:00-17:30		<b>X. Liang.</b> Recent research progress on the ultra-broadband and high efficiency OPCPA technology for high energy few-cycle laser (20 min)	
		<b>M. Zolotavin.</b> Subwavelength fiber probes for scanning the stable electric field structure in counterpropagating laser beams (20 min)	
17:30-17:50	Coffee break		
	Poster Session		
17:50-19:30	<b>NWP-1</b> <b>A.S. Butorova, A.P. Sergeev.</b> Multi-algorithmic software for visual-to-auditory sensory substitution <b>O.A. Goryunov, M.V. Kiselev, V.V. Klinshov.</b> Dynamics of training a simplified network model CoLaNET on a simple classification task <b>N.V.Gromov, T.A.Levanova, L.A. Smirnov.</b> On some properties of output matrices in reservoir computings <b>Yu.M. Ishbulatov, A.M. Vakhlaeva, E.S. Dubinkina, B.P. Bezruchko, A.S. Karavaev.</b> Using neural networks to detect coupling between van der Pol oscillators from noisy and short time series <b>E. Karatetskaia.</b> Hyperchaotic dynamics in economic model of oligopoly market <b>R.A. Kononov, O.V. Maslennikov, V.I. Nekorkin.</b> How population coding shapes recurrent neural network dynamics in continuous signal processing		<b>A. Todeva-Radneva, B. Valkov, R. Paunova, D. Stoyanov, S.Kandilarova.</b> Altered connectivity between the right lingual gyrus and right anterior insula may differentiate unipolar from bipolar depression <b>V. Trifonov, A. Rudikov, O. Iliev, Yu.M. Laevsky, I. Oseledets, E. Muravleva.</b> Efficient preconditioning for iterative methods with graph neural networks <b>V. Zaykova, F. Popova, R. Paunova, S. Kandilarova, D. Stoyanov.</b> Increased connectivity of default mode and salience network hubs in auditory verbal hallucinations <b>NWP-2</b> <b>M. Dorozhkina.</b> Wakefield acceleration with the XCELS laser driver in plasma with a longitudinal density gradient <b>K.A. Glushkov, I.B. Mukhin.</b> Amplification of CEP-stabilized few cycle pulses in the 2- $\mu$ m spectral range

	<p><b><u>N.D. Kulagin</u>, A.V. Andreev, A.A. Koronovskii, O.I. Moskalenko, A.A. Badarin, A.E. Hramov.</b> Intermittency in forecasting stochastic system behavior using reservoir computing</p> <p><b><u>A.A. Panyushev</u>, N.V. Stankevich.</b> Machine learning model ability to reconstruct complex attractors</p> <p><b><u>R. Paunova</u>, D. Stoyanov, S. Kandilarova, F. Kherif.</b> Toward a data-driven neuroscience: premises and tools of the computational turn</p> <p><b><u>I.R. Ramazanov</u>, A.V. Bukh, I.A. Shepelev.</b> Features of synchronization of the ensemble of FitzHugh-Nagumo neurons with Lévy noise</p> <p><b><u>P.A. Shcherbakov</u>, G.V. Osipov.</b> A new type of chimera state in an ensemble of active particles</p> <p><b><u>N.S. Smirnov</u>, S.A. Kurkin, E. Hramov.</b> Topological signatures of functional brain networks in major depressive disorder using persistent homology</p> <p><b><u>I.A. Soloviev</u>, O.A. Gorunov, P.S. Smelov, A.V. Kovalchuk, A.A. Bulkin, V.V. Klinshov.</b> Pose estimation approach in vertebrae recognition</p> <p><b>A. Todeva-Radneva, B. Valkov, <u>R. Paunova</u>, D. Stoyanov, S. Kandilarova.</b> Altered connectivity of the salience, sensorimotor, visuo-occipital, and cerebellar networks may delineate valuable insights in the pathophysiology of the depressive syndrome</p>	<p><b><u>I. Ivonin.</u></b> Self-consistent turbulence in the two-dimensional nonlinear Schrödinger equation with a repulsive potential</p> <p><b><u>A.S. Kuratov</u>, A.V. Brantov, V.Yu. Bychenkov.</b> Electrodynamics coupling of relativistic electrons and guided THz radiation in ultrafast laser-plasma interactions</p> <p><b><u>E. Lipkova</u>, J.W. Wang, S.G. Rykovanov.</b> Attosecond coherent synchrotron emission broadening in plasma target</p> <p><b><u>M.P. Malakhov</u>, A.M. Fedotov, and S.G. Rykovanov.</b> Thomson scattering spectrum in interacting laser and electron beams</p> <p><b><u>S.E. Perevalov</u> and A.A. Soloviev.</b> Refocusing high-power fs-pulses using cone-shaped curved channels</p> <p><b><u>NWP-3</u></b></p> <p><b><u>A.A. Dolinin</u>, N.V. Ilin, F.G. Sarafanov.</b> Experimental installation for the creation and maintenance of hypomagnetic conditions</p> <p><b><u>K.G. Rubinstein</u>, P.A. Konyaev, A.A. Kiselev, M.M. Kurbatova.</b> Nonlinear response of the atmospheric transport model to meteorological forecast uncertainties</p> <p><b><u>S.E. Safonov</u>, A.S. Gavrilov, D.N. Mukhin, R.S. Samoilov.</b> Application of recurrent neural networks to the analysis of mid-latitude atmospheric dynamics regimes</p> <p><b><u>M. Shatalina</u>, F.G. Sarafanov, A.V. Volkova.</b> Modeling of Schumann resonances excited by real sources and comparison with observational results</p>
<b>19:30-20:30</b>	<b>Dinner</b>	
<b>21:00-22:00</b>	<b>Concert</b>	

**Wednesday, September 10**

<b>8:00-9:00</b>	<b>Breakfast</b>		
	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Novel approaches and applications in machine learning</b>	<b>Theoretical investigations on high-power laser and plasma interaction</b>	<b>Atmospheric electricity. Lightnings</b>
<b>9:00-12:00</b>	<b>A. Kadurin.</b> AI for drug discovery (Invited, 30 min)	<b>V. Bychenkov.</b> Solitons in high-field relativistic optics and particle acceleration. Applications. (Invited, 30 min)	<b>E. Mareev.</b> Lightning return stroke: Modeling problems (Invited, 40 min)
	<b>A. Kovalev.</b> Agents with memory for partially observable Markov decision (Invited, 30 min)	<b>I. Kostyukov.</b> Photon statistics and radiative losses of relativistic electrons in strong em fields (Invited, 30 min)	<b>N. Ilin.</b> Large-scale parameterization of global lightning activity (Invited, 30 min)
	<b>M. Khramova.</b> Neurotechnologies in education: personalization of learning through a recommendation service (Invited, 30 min)	<b>A. Brantov.</b> Low-frequency radiation of laser accelerated electrons leaving metal/plasma targets (20 min)	<b>A. Evtushenko.</b> Analysis of global sprite distribution based on WWLLN data (20 min)
	<b>A. Sergeev.</b> Application of machine learning and evaluation of model performance in environmental forecasting tasks	<b>A. Samsonov.</b> Production of electron-positron plasma and strong magnetic fields in interaction of an extremely intense laser radiation	

	(Invited, 30 min)	with a structured solid target (20 min)	
	<b>A. Badarin.</b> Representation and classification of fMRI data using reservoir computing and spatial patterns (Invited, 30 min)	<b>O. Vais.</b> Efficient generation of synchrotron radiation in the relativistic self-trapping regime (20 min)	
	<b>A. Andreev.</b> Reservoir computing as an effective tool for predicting the behavior of stochastic systems (Invited, 30 min)	<b>E. Dmitriev.</b> Orbital angular momentum gain by charged particles in a spatially structured intense linearly polarized laser beam (20 min)	
		<b>I. Aleksandrov.</b> Positron generation in laser plasma and intensity determination (Invited, 30 min)	
<b>12:00-12:30</b>	<b>Coffee break</b>		
<b>12:40-14:00</b>	<b>Plenary session</b>		
<b>12:40-13:20</b>	<b>Sergey Rykovanov</b> (Russia). How can nonlinearity help future Compton gamma sources?		
<b>13:20-14:00</b>	<b>Pavel Berloff</b> (Russia-UK). Challenge and mystery of the oceanic synoptic eddies		
<b>14:00-15:30</b>	<b>Lunch</b>		
<b>16:00</b>	<b>Arrival at Kizhi</b>		
<b>16:00-18:40</b>	<b>Excursion</b>		
<b>19:00</b>	<b>Departure from Kizhi</b>		
<b>19:00-20:00</b>	<b>Dinner</b>		

**Thursday, September 11**

<b>8:00-9:00</b>	<b>Breakfast</b>		
<b>9:00-10:20</b>	<b>Plenary session</b>		
<b>9:00-9:40</b>	<b>Drozdstroy Stoyanov</b> (Bulgaria). Machine learning for solutions of the mind brain problem in psychiatry		
<b>9:40-10:20</b>	<b>Alexander Sergeev</b> (Russia). Physics at the frontier of time: From solar clocks to atomic pulses		
<b>10:20-10:40</b>	<b>Coffee break</b>		
	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Nonlinear dynamics of complex systems</b>	<b>Experimental investigations on laser-plasma interaction and applications. Session 1</b>	<b>Ionosphere and upper atmosphere</b>
<b>10:40-12:20</b>	<b>B. Bezruchko.</b> Application of the method for analyzing the coupling between oscillators by modeling their phase dynamics, relying on the spectral properties of the EEG (Invited, 30 min)	<b>A. Savel'ev.</b> Secondary sources with high replate laser accelerated electron sources (Invited, 30 min)	<b>V. Skalyga.</b> Experimental facilities for laboratory modeling of electromagnetic radiation generation in planetary magnetospheres at IAP RAS (Invited, 30 min)
	<b>A. Karavaev.</b> Using the models of photoplethysmogram and electrocardiogram signals to adjust the method for detection	<b>E. Starodubtseva.</b> Second harmonic generation from plasma channel sheath for laser-plasma electron acceleration diagnostics (20 min)	<b>M. Gushchin.</b> Generation of ultra-wide-band electromagnetic pulses by long spark discharges: New effects in lightning physics (Invited, 30 min)

	of the synchronization between biological systems (Invited, 30 min)		
	<b>E. Borovkova.</b> Methods for monitoring mental fatigue based on biosignal analysis (20 min)	<b>R. Zemskov.</b> Instabilities and magnetic structuring of plasma jets induced by intense PEARL laser (20 min)	<b>A. Nikolenko.</b> Development of flute instabilities during the expansion of plasma flows in a magnetic field in space plasma simulation experiments at Krot plasma device (20 min)
	<b>E. Efremova.</b> Application of ultra-wideband chaotic signals for indoor wireless distance measurement and positioning (20 min)	<b>N. Vrublevskaya.</b> Nonlinear response of diluted gases to an ultraviolet femtosecond pulse: quantum mechanical description (20 min)	<b>N. Blagoveshchenskaya.</b> Nonlinear phenomena in the ionospheric F-region induced by HF pumping under high effective radiated power (20 min)
<b>12:30-14:00</b>	<b>Lunch</b>		
<b>14:00</b>	<b>Arrival at Svir'stroy</b>		
<b>14:00-17:30</b>	<b>Excursion</b>		
<b>18:00</b>	<b>Departure from Svir'stroy</b>		

**Thursday, September 11, evening**

	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Nonlinear dynamics of complex systems. Session 2</b>	<b>Experimental investigations on laser-plasma interaction and applications. Session 2</b>	<b>Atmosphere. Session 2</b>
<b>18:00-19:30</b>	<b>A. Kamchatnov.</b> Hamiltonian dynamics of ring dark solitons (Invited, 30 min)	<b>N. Andreev.</b> Efficient sources of ultra-relativistic particles and hard radiation based on direct laser acceleration of electrons in foam targets (Invited, 30 min)	<b>A. Gritsun.</b> Instability, chaotic behavior and response properties of atmospheric models (Invited, 30 min)
	<b>A. Dmitriev.</b> Multiscale of life and intelligence (Invited, 30 min)	<b>C. Qin.</b> Study of laser-driven proton acceleration in SULF facility (20 min)	<b>E. Mortikov.</b> Numerical simulation of turbulence in urban environment with idealized and realistic surface morphologies (Invited, 30 min)
	<b>S. Kurkin.</b> Analysis of simplicial complexes as an effective approach for detecting higher-order interactions in complex networks: Application examples (Invited, 30 min)	<b>E. Nikolaev.</b> Application of nano- and femtosecond lasers for visualization of surfaces of solid materials and biological tissues (Invited, 30 min)	<b>Ye. Arakelyan.</b> Composite vortex model of Jupiter's Great Red Spot (20 min)
<b>19:30-20:30</b>	<b>Dinner</b>		
<b>20:30-21:30</b>	<b>Round table: Alexander Shenderyuk-Zhidkov</b> (Russia). AI in the context of problems of state regulation and use		
<b>21:30-22:30</b>	<b>Concert</b>		

Friday, September 12

<b>8:00</b>	<b>Arrival at Valaam</b>		
<b>8:00-9:00</b>	<b>Breakfast</b>		
<b>9:00-14:00</b>	<b>Excursion</b>		
<b>14:00-15:30</b>	<b>Lunch</b>		
	<b>NWP-1</b>	<b>NWP-2</b>	<b>NWP-3</b>
	<b>Nonlinear dynamics of complex systems. Session 3</b>	<b>High power and high energy lasers</b>	<b>Views and news. Art projects</b>
<b>15:30-17:30</b>	<b>V. Klinshov.</b> Dynamic convolution for image matching (20 min)	<b>Yu. Klimachev.</b> THz NH3 laser emission at pumping by CO2 laser (Invited, 30 min)	<b>S. Tikhotskiy</b> (Director of Smidt Institute of Physics of the Earth RAS) answers to questions of E. Mareev
	<b>O. Maslennikov.</b> Unveiling the learning process: dynamic representations in RL-driven recurrent neural networks (20 min)	<b>E. Gacheva.</b> Population lensing in a disk multipass amplifier with A-cut YB:KGW active element (20 min)	<b>E. Strelkov.</b> Volga-media art: memory, research, forecast
	<b>D. Kasatkin.</b> Hierarchical formation of synchronization patterns in adaptive network with high-order interaction (20 min)	<b>A. Sagitova.</b> Possibility of explosive detection by terahertz NH3 laser (20 min)	
	<b>A. Dmitrichev.</b> Dynamics of a multi-machine power grid with a common load and its stability to connection and disconnection of generators (20 min)	<b>H. Lin.</b> High-power, high-energy 2um Ho:YLF composite thin disk laser (Invited, 30 min)	
	<b>M. Bolotov.</b> Chimera travel caused by kinks in a system of particles with an internal degree of freedom (20 min)		
	<b>A. Bukh.</b> Effect of interlayer communication delay in the FitzHugh–Nagumo network on its learning performance (20 min)		
<b>17:30-17:50</b>	<b>Coffee break</b>		
<b>18:00-19:00</b>	<b>Closing session (HALL A)</b>		
<b>19:30</b>	<b>Dinner Party</b>		

Saturday, September 13

<b>7:30-8:30</b>	<b>Breakfast</b>
<b>8:00</b>	<b>Arrival in St.Petersburg</b>
<b>8:30-9:00</b>	<b>Departure</b>