



Program

2026

	Sunday August 23	Monday (I parallel) August 24		Monday (II parallel) August 24		Tuesday August 25		Wednesday August 26		Thursday August 27		Friday August 28	Saturday August 29	Sunday August 30	Monday August 31						
09:00-09:30		Opening of the Symposium		Opening Ceremony and Plenary Session			Lin Zhou		Victor Kompanets		Nanophotonics	Artem Golovizin		Physics of ultracold atoms, ions and molecules	Trip to Altai	Cultural Program in Altai	Return to Novosibirsk	Symposium Organizing Committee Meeting			
09:30-10:00		Pavel Pokasov					Dmitry Kapusta		Atom Interferometers, Magnetometers and Other Quantum Sensors — Part I			Stella Kavokina							Andrey Kolovsky		
10:00-10:30		Mingsheng Zhan					Alexey Akimov					Alexey Kucherik							Vladimir Tomilin		
10:30-11:00		Yan Zubavichus					Denis Brazhnikov					Alexey Kavokin							Alexander Dvurechenskiy		
11:00-11:30		Coffee Break					Coffee Break			Coffee Break			Coffee Break								
11:30-12:00	Registration	Sergei Babin		New trends in laser physics	Mikhail Starodubtsev		Laboratory space plasma physics with lasers	Anna Paterova		Evgeny Martynovich	Extreme Light Fields and Nonlinear Optics	Georgy Shlyapnikov		Quantum Information and Quantum Optics — Part I							
12:00-12:30		Linqiang Hua			Mikhail Gushchin			Anton Afanasiev				Alexander Alexandrovsky							Ilya Beterov		
12:30-13:00		Igor Ryabtsev			Ildar Shaikhislamov			Zhenzhou Cheng				Ivan Mukhin							Alexey Kalachev		
13:00-13:15		Pavel Chapovsky			Dmitry Amonsky			Vasilii Entin				Anna Astrakhantseva							Aleksey Andrianov		
13:15-13:30								Maksim Radchenko													
13:30-15:00	Lunch	Lunch			Lunch			Lunch			Lunch			Lunch	Lunch	Lunch					
15:00-15:30	Excursion to Institute of Laser Physics SB RAS	Aleksei Taichenachev		High- resolution spectroscopy and atomic clocks	Dmitry Bisicalo		Spectroscopy and optics of planetary atmospheres	Feng Song		Akademgorodok Tour (15:00-18:00)		Ilya Semerikov		Quantum Information and Quantum Optics — Part II							
15:30-16:00		Xueren Huang			Grigory Tsurikov			Nazar Nikolaev				Ahmed M. Farouk									
16:00-16:30		Subhadeep De			Igor Ptashnik			Alexander Apolonsky				Vladislav Katkov									
16:30-17:00		Xin Tong			Marina Rumenskikh			Olga Cherkasova				Poster Session B (16:00-18:00)									
17:00-17:30		Coffee Break			Coffee Break			Coffee Break				Coffee Break									
17:30-18:00	Registration	Shuang Wang		Fiber optics and fiber lasers	Yuliya Gladysheva		Applications of Laser Radiation from THz to UV in Biomedicine, Technology and Other Fields — Part II	Sergey Vatrik		FRIENDLY DINNER (18:00-23:00)		Poster Session B (16:00-18:00)		Online Session	Cultural Program in Altai	Cultural Program in Altai	Cultural Program in Novosibirsk				
18:00-18:30		Boris Nyushkov			Stanislav Sharipov			Dmitry Churkin				Arun Kumar Pati									
18:30-19:00		Junfeng Jiang						Vladislav Gromyko				Timur Isaev									
19:00-19:15		Anastasiia Lavrova						Olga Khronusova				Alexander Bezruchenko									
19:15-19:30		General Sponsor "CAS Cold Atom"						Dmitriy Genin				Preliminary Conclusions of the Symposium									
19:30-19:45		Sponsor "Special Systems. Photonics"						Poster Session A (19:30-21:30)													
19:45-20:00		Sponsor "The Scientific Equipment Group of Companies"																			
20:00-20:15		Proceed to the Welcome Party																			
20:15-20:30		WELCOME PARTY (20:30-21:30)																			
20:30-21:30		Transition to the Online Session																			
21:30-22:00		Victor Zadkov		Online Session			Ashok Kumar		Online Session												
22:00-22:30		Gerhard Leuchs					Peter Borisjuk														
22:30-23:00		Alexander Shkurinov					Sergey Shvetsov														
23:00-23:30																					

The sessions of the MPLP 2026 symposium will be held in the
lecture hall building Room 442 of NSU
(With the exception of those scheduled for Monday as part of
the second parallel track)

The sessions "Laboratory Physics of Space Clouds" and
"Spectroscopy and Optics of Planetary Atmospheres" will be
held in Room 412 of the NSU lecture hall building

Poster sessions A and B – Room 407 NSU's flow auditorium
building

Monday, August 24

Opening Ceremony and Plenary Session

Chair: Prudnikov Oleg Nikolaevich

- 09:00-09:30

Opening of the Symposium

- 09:30-10:00

Pavel Pokasov

Institute of Laser Physics of the Siberian Branch of the RAS
"35 years of the Institute of Laser Physics SB RAS"

- 10:00-10:30

Mingsheng Zhan

Wuhan Institute of Physics and Mathematics, CAS
"Precision Measurement with Atomic Interferometry"

- 10:30-11:00

Yan Zubavichus, E.B. Levichev

The Center for Collective Use "Siberian Ring Photon Source"
*"Synchrotron Radiation Facility SKIF: project implementation
status, research program, and infrastructure development"*

- 11:00-11:30

Coffee Break

New trends in laser physics

Chair: Mingsheng Zhan

- 11:30-12:00

Sergei Babin

Institute of Automation and Electrometry SB RAS

“Random fiber laser: from curious case to reliable tool”

- 12:00-12:30

Linqiang Hua, Xiaojun Liu

Innovation Academy for Precision Measurement Science and Technology, CAS

“Extreme Ultraviolet Frequency Comb and Its Applications”

- 12:30-13:00

Igor Ryabtsev, I.I. Beterov, N.N. Bezuglov, E.A. Yakshina,

G. Suliman, D.B. Tretyakov, V.M. Entin, K. Miculis

Rzhanov Institute of Semiconductor Physics, SB RAS

“Three-photon laser excitation of Rydberg atoms for quantum information”

- 13:00-13:30

Pavel Chapovsky

Institute of Automation and Electrometry, SB RAS; Institute of Laser Physics, SB RAS; International Tomography Center, SB RAS

“Experimental investigation of photon frequency shift in stimulated emission”

- 13:30-15:00

Lunch

High-resolution spectroscopy and atomic clocks

Chair: Ryabtsev Igor Ilyich

- 15:00-15:30

Aleksei Taichenachev

Institute of Laser Physics, SB RAS

“Nuclear Optical Clocks”

- 15:30-16:00

Xueren Huang, Jian Cao, Yi Yuan, Xuanjian Wang, Xinyue Guo, Huitao Ren, Hualin Shu

Innovation Academy for Precision Measurement Science and Technology, CAS

“Research and Application of Miniaturized single Ion Optical Clock”

- 16:00-16:30

Subhadeep De, S. Banerjee

Inter-University Center for Astronomy and Astrophysics

“Development of Ytterbium-Ion-Based Optical Atomic Clock”

- 16:30-17:00

Xin Tong, Wen-cui Peng, Sheng-Guo He

Innovation Academy for Precision Measurement Science and Technology, CAS

“Precision Laser Spectroscopy via Coulomb Crystals”

- 17:00-17:30

Coffee Break

Fiber optics and fiber lasers

Chair Babin Sergei Alexeevich

- 17:30-18:00

Shuang Wang, Hongyu Liu, Penghui Dai, Tianxiang Sun, Xueyi Wu, Lu Tian, Xiaoshuang Dai, Junfeng Jiang and Tiegeng Liu

Tianjin University

“Research on the Interference Coupling Model of Optical Fiber Microcavity and Multi-Parameter Sensing Technology”

- 18:00-18:30

Boris Nyushkov, I. Novikov, N. Golovin, K. Savinov, A. Krivetsky, M. Radchenko, V. Boldyrev, A. Dmitriev, I. Korel, and A. Vostretsov

Novosibirsk State Technical University

“Exploration of fiber-based and fiber-coupled photonic devices at cryogenic temperatures down to 4 K”

- 18:30-19:00

Junfeng Jiang, Jinchao Dou, Wei Cheng, Genming Dong,
Xiaoshuang Dai, Jie Du, Shuang Wang, Kun Liu, Hengfeng Yan,
Youjian Song

Tianjin University

*“Development of flexible and portable coherent Raman
scattering spectrum instrument in optical fiber format”*

- 19:00-19:15

Anastasiia Lavrova, A. Ponosova, E. Borisova, V. Makarov
Junior researcher NUST MISIS; Russian Quantum Centre

“Fiber Optic Tapers as Passive Optical Power Limiters”

- 19:15-19:45

General Sponsor "CAS Cold Atom"

- 19:45-20:00

Sponsor "Special Systems. Photonics"

- 20:00-20:15

Sponsor "The Scientific Equipment Group of Companies"

- 20:15-20:30

Proceed to the Welcome Party

- 20:30-21:30

WELCOME PARTY

- 21:30-22:00

Transition to the Online Session

Online Session

Chair: Taichenachev Aleksei Vladimirovich

- 22:00-22:30

Victor Zadkov

The Institute of Spectroscopy RAS

*“Will quantum computers replace classical ones and is there an
alternative to parallel computing?”*

- 22:30-23:00

Gerhard Leuchs, Hans Dang, Sebastian Luff, Nikolay Kalinin,
Thomas Dirmeier, Martin Fischer, Markus Sondermann,
Mojdeh. S. Najafabadi, Luis L. Sanchez-Soto

Max Planck Institute for the Science of Light

“Measuring quantum properties of light at low intensity for any statistics”

- 23:00-23:30

Alexander Shkurinov

Lomonosov Moscow State University

“Terahertz Limit”: From History to Beautiful Physical Effects”

Monday (II parallel), August 24

Laboratory space plasma physics with lasers

Chair: Shaikhislamov Ildar Faritovich

- 11:30-12:00

Mikhail Starodubtsev, R. Zemskov, M. Barkov, E. Blinov, K. Burdonov, V. Ginzburg, A. Kochetkov, A. Kotov, A. Kuzmin, S. Perevalov, I. Shaikin, S. Stukachev, I. Yakovlev, A. Soloviev, A. Shaykin, E. Khazanov, J Fuchs

Institute of Applied Physics RAS

“Instabilities and magnetic structuring of plasma flows generated by high-power nanosecond and femtosecond laser pulses”

- 12:00-12:30

Mikhail Gushchin

Institute of Applied Physics

“Active Space Experiments and Their Modeling on Large-Scale Laboratory Plasma Devices”

- 12:30-13:00

Ildar Shaikhislamov, A.A. Chibranov, A.E. Ivanov, A.G. Berezutsky, V.G. Posukh, M.V. Loginov, P.A. Trushin, M.S. Rumenskikh, Yu.P. Zakharov, I.B. Miroshnichenko

Institute of Laser Physics SB RAS

“Laser plasma experiments to model geophysical processes and phenomena”

- 13:00-13:30

Dmitry Amonsky, A.V. Kovalenko, A.D. Malakhov

Russian Federal Nuclear Center – All-Russia Research Institute
of Experimental Physics

“Aerographite Target for Laboratory Astrophysical Research”

- 13:30-15:00

Lunch

Spectroscopy and optics of planetary atmospheres

Chair: Shaikhislamov Ildar Faritovich

- 15:00-15:30

Dmitry Bisicalo

National Center for Physics and Mathematics

*“Searching for observable biosignatures in exoplanetary
atmospheres”*

- 15:30-16:00

Grigory Tsurikov, D. Bisikalo, V. Shematovich, A. Zhilkin

Institute of astronomy of the RAS

*“Spectroscopy of exoplanet atmospheres using the Spektr-UF
space telescope”*

- 16:00-16:30

Igor Ptashnik

V.E. Zuev Institute of Atmospheric Optics, SB RAS

*“Water vapor in the atmospheric radiative balance. Continuum
absorption by water vapor”*

- 16:30-16:45

Marina Rumenskikh, M.P. Golubovsky, S.S. Sharipov, I.F.

Shaikhislamov

Institute of Laser Physics SB RAS

*“Influence of planetary magnetic fields on extended helium tails
of WASP-69b”*

- 16:45-17:00

Ksenia Gorbunova

Institute of Computational modelling SB RAS

*“Estimating XUV flux and constraining exoplanet radius from
hydrodynamic escape modeling”*

- 17:00-17:30

Coffee Break

- 17:30-18:00

Gladysheva Yuliya, A.G. Zhilkin

Institute of Laser Physics SB RAS

“Aeronomic model of the hydrogen-helium atmosphere of hot Jupiter”

- 18:00-18:30

Sharipov Stanislav, I.F. Shaikhislamov, M.S. Rumenskikh, I.B. Miroshnichenko

Institute of Laser Physics SB RAS

“Modeling the Upper Atmosphere of the Ultra-Hot Jupiter KELT-20 b”

Tuesday, August 25

Atom Interferometers, Magnetometers and Other Quantum Sensors — Part I

Chair: Afanasiev Anton Evgenievich

- 09:00-09:30

Lin Zhou, Chuan He, Lu Zhou, Si-Tong Yan, Jun-Jie Jiang, Jia-Qi Lei, Run-Dong Xu, Zhuo Hou, Zhi-Xin Li, You-Meng Hu, Jia-Ming Wei, Jin Wang, and Ming-Sheng Zhan

Innovation Academy for Precision Measurement Science and Technology, CAS

“Equivalence Principle test with 10-meter atom interferometer”

- 09:30-10:00

Dmitry Kapusta, K.N. Adamov, A.E. Bonert, A.N. Goncharov, M.A. Nelin, K. E. Rekhtin, A.V. Taichenachev, V.I. Yudin, O.N. Prudnikov

Institute of Laser Physics SB RAS

“Study of Systematic Shifts in an Atom Interferometer-Gravimeter”

- 10:00-10:30

Alexey Akimov

Russian Quantum center

“Manipulation of the nuclear spin of NV centers”

- 10:30-11:00

Denis Brazhnikov, A.O. Makarov, K.S. Kozlova, M.A. Rusina, R.A. Tkachenko, A.M. Mikhailov, V.A. Vasiliev, E.V. Tanakov, A.N. Goncharov, M.A. Bobrov, Ya.N. Kovach, A.A. Blokhin, N.A. Maleev, S.A. Blokhin

Institute of Laser Physics SB RAS

“New approaches in high-sensitivity atomic magnetometry for geophysical measurements and medicine”

- 11:00-11:30

Coffee Break

Quantum Sensors and Precision Spectroscopy — Part II

Chair: Akimov Alexey Vladimirovich

- 11:30-12:00

Anna Paterova, A.S. Sabanin, S.P. Kulik

South Ural State University

“Quantum spectroscopy using correlated photon pairs”

- 12:00-12:30

Anton Afanasiev, D.V. Bykova, A.A. Idrisova, A.S. Kalmykov, V.I. Balykin

Institute of spectroscopy RAS

“Planar elements for cold-atom quantum sensors”

- 12:30-13:00

Zhenzhou Cheng

Tianjin University

“Silicon Photonics for Gas Sensing”

- 13:00-13:15

Vasiliy Entin, D. B. Tretyakov, E. A. Yakshina, I.I. Ryabtsev
Rzhanov Institute of Semiconductor Physics, SB RAS

“Calibrating the radiation intensity of a microwave generator using a quantum sensor based on ^{87}Rb Rydberg atoms in a vapor cell”

- 13:15-13:30

Maksim Radchenko, Yudin V. I., Basalaev M. Yu.,
Taichenachev A. V. Prudnikov O. N.

Institute of Laser Physics SB RAS

*“Comparative analysis of magneto-optical resonances in 87 Rb
using modulated bichromatic light”*

- 13:30-15:00

Lunch

Applications of Laser Radiation from THz to UV in
Biomedicine, Technology and Other Fields — Part I

Chair: Paterova Anna Vladimirovna

- 15:00-15:30

Feng Song, Dehui Lin, Fei Liang, Yuting Dong, Ming Feng, Lisa
Liu

Nankai University

“Physical mechanism and applications on laser cleaing”

- 15:30-16:00

Nazar Nikolaev

Institute of Automation and Electrometry SB RAS

*“Terahertz Time-Domain Spectroscopy: The Method and
Specific Features of Its Application”*

- 16:00-16:30

Alexander Apolonsky, A.S.Kuchyanov, P.A. Chubakov, V.A.
Sorokin

Institute of Automation and Electrometry SB RAS

“Sub-ppm, fast optical humidity sensor”

- 16:30-17:00

Olga Cherkasova

Institute of Laser Physics SB RAS

“Biomedical applications of terahertz technology”

- 17:00-17:30

Coffee Break

Applications of Laser Radiation from THz to UV in
Biomedicine, Technology and Other Fields — Part II

Chair: Feng Song

- 17:30-18:00

Sergey Vatnik

Metrology Lab VPG LaserONE LLC

“High resolution laser calorimetry of transparent optical materials”

- 18:00-18:30

Dmitry Churkin, E.S. Kargapol'tsev, and R.A. Tkachenko

Institute of Laser Physics SB RAS

“Pulsed inductive discharge as an alternative method for pumping gas active media under low pressure”

- 18:30-18:45

Vladislav Gromyko, I.V. Khorsova, I.I. Beterov

Engineer Institute of Semiconductor Physics SB RAS, PhD student

“Adaptive Algorithm for Laser Sensorless Wavefront Correction Using Multi-Criteria Beam Focusing Analysis”

- 18:45-19:00

Olga Khronusova, A.K. Vorobyev, D.V. Morozov, K.S. Kudiyarov, N.O. Zhadnov, D.A. Chermoshentsev, I.A. Bilenko, N.N. Kolachevsky

P.N. Lebedev Physical Institute

“Chip-scale SIL laser stabilized to a miniature Fabry-Pérot cavity”

- 19:00-19:15

Dmitriy Genin, E. Lipatov, P. Komarova, V. Vins

Institute of High Current Electronics SB RAS

“Laser generation on NV-centers in diamond”

- 19:15-19:30

Ekaterina Kocharovskaya, Vl. V. Kocharovsky

Federal research center A.V. Gaponov-Grekhov Institute of Applied Physics of the RAS

“Inhomogeneous vs homogeneous spectral line broadening in different superradiant lasing modes”

Poster Session

Chair: Makarov Anton Olegovich

- 19:30-21:30

Poster Session A

Yaroslava Antonenko, I.V. Sherstov

Institute of Laser Physics SB RAS

“Detection of N₂O and NO₂ absorption in the atmosphere using a laser gas analyzer”

Anton Filonov, V.S. Pivtsov, N.A. Koliada

Institute of Laser Physics SB RAS

“Erbium-doped NALM fiber laser with dispersion wedges”

Hala Dyab, P. A. Statsenko, S. I. Trashkeev, S. G. Strutz, M. N. Khomyakov, N. V. Shakhaov, A.P. Mayorov

Institute of Laser Physics of the SB RAS

“Integrated Modeling of Pump Distribution and Thermal Lensing in a Flashlamp-Pumped Nd:YAG Laser”

Artem Ivanov, I.F. Shaikhislamov, V.G. Posukh, A.G. Berezutsky, A.A. Chibranov, M.V. Loginov, M.S. Rumenskikh, I.B. Miroshnichenko, Yu.P. Zakharov

Institute of Laser Physics SB RAS

“Laboratory simulation of plasma jet expansion in a transverse magnetic field”

Anna Ginkel, O.A. Morozov, S.L. Korableva, M.S. Pudovkin, R.M. Rakhmatullin, A.A. Rodionov, V.V. Semashko

Kazan (Volga Region) Federal University

“Local surroundings of Nd³⁺ ions in CeO₂ nano- and microparticles”

Maksim Golubovsky, A.G. Zhilkin, D.V. Bisikalo, G.N. Tsurikov

Institute of Laser Physics SB RAS

“The effect of Coronal Mass Ejections on exoplanet Ly α line absorption”

Svetlana Kalinichenko, M.S. Pudovkin

Kazan (Volga) Federal University

“Investigation of the temperature dependence of the luminescent intensity ratio in CeF₃-YF₃-TbF₃ nanoparticles”

Ksenia Kozenko, V.V. Gromyko, I.I. Beterov

Rzhanov Institute of Semiconductor Physics SB RAS

“Symmetric quantum gates for the generation of entangled states of ultracold neutral atoms”

Katerina Kozlova, A.O. Makarov, D.V. Brazhnikov, A.N. Goncharov

Institute of Laser Physics SB RAS

“Magneto-optical Hanle resonances in the cesium vapor for quantum magnetometry application”

Alyona Kuptsova, G.V. Kuptsov, V.A. Petrov, V.V. Petrov

Institute of Laser Physics SB RAS

“Temperature and wavelength dependent absorption in Yb:YAG and its application for high-power laser systems”

Igor Kuzmin

Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Numerical simulation of the tight focusing of the ultrashort laser pulses taking into account spatio-temporal nonidealities”

Igor Kuzmin, E. Kocharovskaya

Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Dynamics of a superradiant laser with a four-level inhomogeneously broadened active medium”

Ilya Lopatkin, M.Yu. Kandaurova, T.Yu. Sablina, I.A. Zyatikov, Yu.N. Panchenko

National Research Tomsk Polytechnic University

“UV laser induced surface modification of TiNi alloy”

Timur Minnebaev, A.S. Nizamutdinov, A.A. Shavelev, V.V. Semashko

Kazan (Volga Region) Federal University

“Energy transfer and dynamics of the $3 F 4 \rightarrow 3 H 6$ and $5 I 7 \rightarrow 5 I 8$ states of Tm^{3+} and Ho^{3+} ions in mixed $LiY 0.3 Lu 0.7 F 4$ crystals”

Konstantin Reznikov, A.V. Naumov

P.N. Lebedev Physical Institute RAS

“Experimental Approach to Detection of Photoinduced Residual Absorption in Direct Diode-Pumped $Ti:Sapphire$ ”

Roman Safonov, I. Gerasin, A. Russkikh, N. Zhadnov, K. Kudiyarov, P. Sidorov, V. Erin, I. Semerikov, N. Kolachevsky
Lebedev Physical Institute RAS

“Surface ion traps at room and cryogenic temperatures”

Alexander Samsonov, A. A. Zakharova, I. Yu. Kostyukov

Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Optimizing the Compton radiation source in linear and weakly nonlinear regimes using GPU-accelerated code”

Alexander Samsonov, A. A. Zakharova, I. Yu. Kostyukov

Federal Research Center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Improving performance of Compton radiation sources by controlling the dynamics of laser beam focus”

Ivan Samsonov, I.B. Mukhin, K.A. Glushkov, I.I. Kuznetsov

A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Laser testbed for inverse Compton scattering experiments at the VEPP-4M collider”

Stanislav Sharipov, I.F. Shaikhislamov, M.S. Rumenskikh, and I.B. Miroshnichenko

J Institute of Laser Physics SB RAS

“Modeling the Upper Atmosphere of the Ultra-Hot Jupiter KELT-20 b”

Ekaterina Shosheva, M. Pudovkin, R. Rakhmatullin

Kazan (Volga Region) Federal University

“Control of defect concentration in $YF_3 : Nd^{3+}$, Yb^{3+} nanoparticles and their application in luminescent thermometry”

Ekaterina Trefilova, A. Kalinin, E. Ivashkina, A. Shevalenko, D. Sutyurin

LTD «Bazovyeologii »

“Achieving navigation-grade accuracy in a miniature resonant fiber-optic gyroscope with a broadband source”

Online Session

Chair: Makarov Anton Olegovich

- 21:30-22:00

Ashok Kumar

Indian Institute of Space Science and Technology, IIST

“Quantum Technologies with Light: From Security to Sensing”

- 22:00-22:30

Peter Borisjuk, V.A. Shilov, D.A. Myzin, Y.Y. Lebedinskiy, E.V. Chubunova, Z.M. Nauryzbaev, E.V. Tkalya, and R.K. Kurbaniyazov

NRNU MEPhI

“Perspectives to create a gamma laser based on the ^{229}Th embedded into AlF_3 dielectric medium”

- 22:30-23:00

Sergey Shvetsov, D.D. Darmoroz, T. Orlova, M. Rafayelyan

P.N. Lebedev Physical Institute of the Russian Academy of Sciences

“Photosensitive Liquid Crystals: From Optical Orientational Nonlinearities to Topological Structure Formation and Microparticle Manipulation”

Wednesday, August 26

Nanophotonics

Chair: Martynovich Evgeny Fedorovich

- 09:00-09:30

Victor Kompanets, A.V. Kireev, K. Sabour, S.Y. Alyatkin, N.S. Kostyuchenko¹, S.A. Zhuravitskii, N.N. Skryabin, I.V. Dyakonov, A.A. Kalinkin, K.A. Sitnik, S.K. Ivanov, S.P. Kulik, S.V. Chekalin, P.G. Lagoudakis, Y. Zhang, Y. Li, V.N. Zadkov, Y.V. Kartashov

Institute for Spectroscopy

“Observation of topological vortex solitons in aperiodic waveguide arrays”

- 09:30-10:00

Stella Kavokina

Moscow Institute of Physics and Technology

“Semiconductor–Semimetal Transition in van der Waals Carbyne Crystals”

- 10:00-10:30

Alexey Kucherik, A. Lelekova, A. Povolotskiy, A. Osipov
Vladimir State University

“Laser synthesis of linear carbon chains: prospective applications in photonics and sensing”

- 10:30-11:00

Alexey Kavokin

Moscow Institute of Physics and Technology

“New phases of light and matter”

- 11:00-11:30

Coffee Break

Extreme Light Fields and Nonlinear Optics

Chair: Kucherik Alexey Olegovich

- 11:30-12:00

Evgeny Martynovich, V.P. Dresvianskiy

Irkutsk Branch of the Institute of Laser Physics SB RAS
“Nonlinear photographic media with fluorescence imaging, their research and applications”

- 12:00-12:30

Alexander Alexandrovsky

L.V. Kirensky Institute of Physics, SB RAS

“Nonlinear Optics and DUV/VUV Generation in Strontium Tetraborate”

- 12:30-13:00

Ivan Mukhin, Volkov M.R., Perevezentsev E.A., Gorokhov A.I., Kuznetsov I.I., Khairulin I.R.

Institute of Applied Physics

“Scaling specificities of high energy capacity active mirror disk shaped active elements”

- 13:00-13:15

Anna Astrakhantseva, T. M. Minnebaev, A. A. Shavelyev, A. G. Nikolaev, K. N. Boldyrev, A. S. Nizamutdinov

Kazan (Volga Region) Federal University

“Dynamic processes in low-lying states of the Er 3+ ion in the BaY 1.8 Lu 0.2 F 8 crystal”

- 13:30-15:00

Lunch

- 15:00-18:00

Akademgorodok Tour

- 18:00-23:00

FRIENDLY DINNER

Thursday, August 27

Physics of ultracold atoms, ions and molecules

Chair: Kalachev Alexey Alexeevich

- 09:00-09:30

Artem Golovizin

N. Lebedev Physical Institute RAS

“Optical clocks based on neutral thulium atoms”

- 09:30-10:00

Andrey Kolovsky

L.V. Kirensky Institute of Physics, Siberian Branch of the Russian Academy of Sciences

“Quantum transport with cold atoms in optical lattices”

- 10:00-10:30

Vladimir Tomilin, A.V. Shepelin, A.M. Rostom, and L.V. Il'ichov

Institute of Automation and Electrometry SB RAS

“Extremal unravelling for control of a double-well atomic Bose-Einstein condensate”

- 10:30-10:45

Alexander Dvurechenskiy, D.I. Vorochenko, B. A. Bessmertnykh, D.A. Mishin, D.O. Tregubov, N.N. Kolachevsky, A.A. Golovizin

Lebedev Physical Institute of the RAS

“Efficient loading of the magneto-optical trap from a Zeeman-slowed atomic beam and detection of Tm atoms using the 530-nm transition with natural linewidth of 350 kHz”

- 10:45-11:00

Denis Krysenko, O.N. Prudnikov, V.I. Yudin, Taichenachev, S.V. Chepurov

Institute of Laser Physics, SB RAS

“Ramsey and Hyper-Ramsey spectroscopy of the octupole transition of ytterbium-171 ion in small magnetic fields”

- 11:00-11:30

Coffee Break

Quantum Information and Quantum Optics — Part I

Chair: Golovizin Artem Alexeevich

- 11:30-12:00

Georgy Shlyapnikov, Soleh Kh. Muminov, Evgeniy O. Kiktenko, Anastasiia S. Nikolaeva, Denis A. Drozhzhin, Sergey I. Matveenko, Aleksey K. Fedorov

Russian Quantum Center

“Qudit-based quantum computing using polar molecules”

- 12:00-12:30

Ilya Beterov, K. V. Kozenko, V. V. Gromyko, E. A. Yakshina, S. A. Spirin, Peng Xu, I. I. Ryabtsev

Rzhanov Institute of Semiconductor Physics SB RAS

“Numerically optimized quantum gates for ultracold neutral atoms”

- 12:30-13:00

Alexey Kalachev

Federal Research Center «Kazan Scientific Center of Russian Academy of Sciences»

“Towards quantum repeaters: developing basic units and perspectives”

- 13:00-13:30

Aleksey Andrianov

Institute of Applied Physics

“Lineshape synthesis and contrast enhancement in laser radiation spectroscopy using high-Q resonators”

- 13:30-15:00

Lunch

Quantum Information and Quantum Optics — Part II

Chair: Shlyapnikov Georgy Vsevolodovich

- 15:00-15:30

Ilya Semerikov

National University of Science and Technology «MISIS»

- 15:30-15:45

Ahmed M. Farouk, I.I.Beterov, G.Suliman, J.Chen,
I.I.Ryabtsev

Rzhanov Institute of Semiconductor Physics SB RAS

“Quantum Spin Liquid State of a Dual-Species Atomic Array on Kagome Lattice”

• 15:45-16:00

Vladislav Katkov, N. Zlatanov

Innopolis University

“Rydberg quantum receiver with Stark-mixed states”

Poster Session

Chair: Tkachenko Roman Andreevich

• 16:00-18:00

Poster Session B

Mikhail Bobrov, Ya. Kovach, A. Blokhin, N. Kuzmenkova, A.
Vasil'ev, A. Kuzmenkov, N. Maleev, S. Blokhin

A.I. Ioffe Phys.-Tech. Inst. RAS

“Polarization state of 89Xnm-range intracavity-contacted oxide-confined VCSELs”

Sergey Chepurov, N.S. Lapin, M.I. Nesterenko, D.Y. Primakov,
N.A. Kolyada, A.A. Filonov, V.S. Pivtsov, S.A. Kuznetsov

Institute of Laser Physics SB RAS

“¹⁷¹Yb⁺ single ion optical clock development”

Stepan Ignatovich, I.S.Mesenzova, E.A.Lubutin,
M.N.Skvortsov

Institute of Laser Physics SB RAS

“Efficient generation of the fourth harmonic of CW emission for precision UV spectroscopy”

Roman Ilyenkov, O.N. Prudnikov, V.I. Yudin, A.A.
Kirpichnikova, A.V. Taichenachev

Institute of Laser Physics SB RAS

“Cooling and trapping of neutral atoms in bichromatic optical trap”

Marina Kandaurova, T.Yu. Sablina, I.A. Zyatikov, I.K. Lopatkin, Yu.N. Panchenko

Institute of High Current Electronics SB RAS

“Structure and surface property response of Ti-6Al-4V alloy to nanosecond UV laser irradiation”

Anna Kirpichnikova, R.Ya. Ilenkov, O.N. Prudnikov

Institute of Laser Physics SB RAS

“Developing macroscopic entirely optical trap for Hg atoms”

Ekaterina Kocharovskaya, Vl. V. Kocharovsky

Federal research center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Transition from a class B laser to a class D laser: Transformation of the electromagnetic mode into the polariton mode and the emergence of elements of the superradiant dynamics”

Ekaterina Kocharovskaya, E. A. Khazanov

Federal research center A.V. Gaponov-Grekhov Institute of Applied Physics RAS

“Reducing the probability of optical breakdown when passing high-power femtosecond pulses through new type compressors”

Pavel Statsenko, Hala Diab, M.N. Khomyakov, A.P. Maiorov, N.V. Shahov, S.I. Trashkeev

Researcher Institute of Laser Physics SB RAS

“Numerical Modeling of Lasing Dynamics in a Passively Q-Switched Nd:YAG Laser Accounting for Dynamic Thermal Lensing”

Sergey Trashkeev, P.A. Statsenko, M.N. Khomyakov

Institute of Laser Physics SB RAS

“New Formulation of Maxwell's Equations for Four Potentials”

Sergey Trashkeev

Institute of Laser Physics SB RAS

“Maxwell's form of relativistic quantum equations”

Zhenzhou Cheng

Tianjin University

“Silicon Photonics for Gas Sensing”

Jing Chen, Songfen Liu

Nankai University

“Femtosecond Laser Embedded Structural Color for Fused Silica Sculpture”

Sitong Yan, Lu Zhoua, Chuan He, Jun-Jie Jiang, Jia-Qi Lei, Run-Dong Xu, Zhuo Hou, Zhi-Xin Li, You-Meng Hu, Jia-Ming Wei, Lin Zhou, Jin Wang, Ming-Sheng Zhan

Innovation Academy for Precision Measurement Science and Technology, CAS

“Recent progress of the dual-species 10-m atom interferometer”

- 17:00-17:30

Coffee Break

Online Session

Chair: Beterov Ilya Igorevich

- 18:00-18:30

Arun Kumar Pati

Harish-Chandra Research Institute

“Quantum Speed Limit in Quantum Computing”

- 18:30-19:00

Timur Isaev

Lomonosov Moscow State University

“On the prospects of laser-coolable molecular cations”

- 18:30-18:45

Bezruchenko Alexander, V.Shilov, G. Lesovik

“BOTDA-based eavesdropper localization procedure in 100 km fiber-optic communication link.”

Participant	Day	Time
Afanasiev Anton	Tuesday, August 25	12:00–12:30
Akimov Alexey	Tuesday, August 25	10:00–10:30
Alexandrovsky Alexander	Wednesday, August 26	12:00–12:30
Amonsky Dmitry	Monday, August 24 (parallel II)	13:00–13:30
Andrianov Aleksey	Thursday, August 27	13:00–13:30
Apolonsky Alexander	Tuesday, August 25	16:00–16:30
Astrakhantseva Anna	Wednesday, August 26	13:00–13:15
Babin Sergei	Monday, August 24	11:30–12:00
Beterov Ilya	Thursday, August 27	12:00–12:30
Bezruchenko Alexander	Thursday, August 27	19:00–19:15
Bisicalo Dmitry	Monday, August 24 (parallel II)	15:00–15:30
Borisyuk Peter	Tuesday, August 25	22:00–22:30
Brazhnikov Denis	Tuesday, August 25	10:30–11:00
Chapovsky Pavel	Monday, August 24	13:00–13:30
Cheng Zhenzhou	Tuesday, August 25	12:30–13:00
Cherkasova Olga	Tuesday, August 25	16:30–17:00
Churkin Dmitry	Tuesday, August 25	18:00–18:30
De Subhadeep	Monday, August 24	16:00–16:30
Dvurechenskiy Alexander	Thursday, August 27	10:30–10:45
Entin Vasiliy	Tuesday, August 25	13:00–13:15
Farouk Ahmed M.	Thursday, August 27	15:30–15:45
Genin Dmitriy	Tuesday, August 25	19:00–19:15
Gladysheva Yuliya	Monday, August 24 (parallel II)	17:30–17:45
Golovizin Artem	Thursday, August 27	09:00–09:30
Gorbunova Ksenia	Monday, August 24 (parallel II)	16:45–17:00
Gromyko Vladislav	Tuesday, August 25	18:30–18:45

Gushchin Mikhail	Monday, August 24 (parallel II)	12:00–12:30
Hua Linqiang	Monday, August 24	12:00–12:30
Huang Xueren	Monday, August 24	15:30–16:00
Isaev Timur	Thursday, August 27	18:30–19:00
Jiang Junfeng	Monday, August 24	18:30–19:00
Kalachev Alexey	Thursday, August 27	12:30–13:00
Kapusta Dmitry	Tuesday, August 25	09:30–10:00
Katkov Vladislav	Thursday, August 27	15:45–16:00
Kavokin Alexey	Wednesday, August 26	10:30–11:00
Kavokina Stella	Wednesday, August 26	09:30–10:00
Khronusova Olga	Tuesday, August 25	18:45–19:00
Kocharovskaya Ekaterina	Tuesday, August 25	19:15–19:30
Kolovsky Andrey	Thursday, August 27	09:30–10:00
Kompanets Victor	Wednesday, August 26	09:00–09:30
Krysenko Denis	Thursday, August 27	10:45–11:00
Kucherik Alexey	Wednesday, August 26	10:00–10:30
Kumar Ashok	Tuesday, August 25	21:30–22:00
Lavrova Anastasiia	Monday, August 24	19:00–19:15
Leuchs Gerhard	Monday, August 24	22:30–23:00
Martynovich Evgeny	Wednesday, August 26	11:30–12:00
Mukhin Ivan	Wednesday, August 26	12:30–13:00
Nikolaev Nazar	Tuesday, August 25	15:30–16:00
Nyushkov Boris	Monday, August 24	18:00–18:30
Paterova Anna	Tuesday, August 25	11:30–12:00
Pati Arun Kumar	Thursday, August 27	18:00–18:30
Pokasov Pavel	Monday, August 24	09:30–10:00
Ptashnik Igor	Monday, August 24 (parallel II)	16:00–16:30
Radchenko Maksim	Tuesday, August 25	13:15–13:30

Rumenskikh Marina	Monday, August 24 (parallel II)	16:30–16:45
Ryabtsev Igor	Monday, August 24	12:30–13:00
Semerikov Ilya	Thursday, August 27	15:00–15:30
Shaikhislamov Ildar	Monday, August 24 (parallel II)	12:30–13:00
Sharipov Stanislav	Monday, August 24 (parallel II)	17:45–18:00
Shkurinov Alexander	Monday, August 24	23:00–23:30
Shlyapnikov Georgy	Thursday, August 27	11:30–12:00
Shvetsov Sergey	Tuesday, August 25	22:30–23:00
Song Feng	Tuesday, August 25	15:00–15:30
Starodubtsev Mikhail	Monday, August 24 (parallel II)	11:30–12:00
Taichenachev Aleksei	Monday, August 24	15:00–15:30
Tomilin Vladimir	Thursday, August 27	10:00–10:30
Tong Xin	Monday, August 24	16:30–17:00
Tsurikov Grigory	Monday, August 24 (parallel II)	15:30–16:00
Vatnik Sergey	Tuesday, August 25	17:30–18:00
Wang Shuang	Monday, August 24	17:30–18:00
Zadkov Victor	Monday, August 24	22:00–22:30
Zhan Mingsheng	Monday, August 24	10:00–10:30
Zhou Lin	Tuesday, August 25	09:00–09:30
Zubavichus Yan	Monday, August 24	10:30–11:00

Poster Sessions

Poster Session A

Tuesday, August 25,
19:30-21:30

Antonenko Yaroslava

Dyab Hala

Filonov Anton

Ginkel Anna

Golubovsky Maksim

Ivanov Artem

Kalinichenko Svetlana

Kozenko Ksenia

Kozlova Katerina

Kuptsova Alyona

Kuzmin Igor

Lopatkin Ilya

Minnebaev Timur

Reznikov Konstantin

Safonov Roman

Samsonov Alexander

Samsonov Ivan

Sharipov Stanislav

Shosheva Ekaterina

Trefilova Ekaterina

Poster Session B

Thursday, August 27,
16:00-18:00

Bobrov Mikhail

Chen Jing

Cheng Zhenzhou

Chepurov Sergey

Ignatovich Stepan

Ilyenkov Roman

Kandaurova Marina

Kirpichnikova Anna

Kocharovskaya Ekaterina

Statsenko Pavel

Trashkeev Sergey

Yan Sitong

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