

# METANANO 2018 Conference program (preliminary)

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## Sunday, September 16th

18:00	20:00	<b>Registration</b> [Reception Desk of the Omega Sochi hotel]
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## Monday, September 17th

8:00	8:45	<b>Registration</b> [Entrance to the Sirius park (conference venue)]
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8:50	9:00	<b>Opening Ceremony</b> [Orange Hall]
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9:00	9:40	<b>Stefan Maier</b> "Charge transfer in nanoplasmonics as an avenue for control of chemical SERS enhancement and molecular self-assembly" [Orange Hall]
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9:40	10:10	<b>Coffee break</b>
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Session: "Plasmonics I" [Hall 1]				Session: "Light-Matter Interaction" [Hall 2]				Session: "Toroidal response: from meta-atoms to metamaterials" Session Organizers: A. Miroshnichenko & P. Kapitanova [Hall 3]			
10:10	10:40	<b>Mikael Käll</b> Plasmonic Nanostructures for Molecular Sensing and Actuation	Keynote	10:10	10:30	<b>Almas Sadreev</b> Near bound states in the radiation continuum in circular array of dielectric rods	Invited	10:10	10:30	<b>Yi Xu</b> Exotic optical scattering mediated by toroidal dipole moment in nanoparticles	Invited
10:40	11:00	<b>Victor Balykin</b> Planar plasmonic optics: from basic elements to quantum generator	Invited	10:30	10:50	<b>Ronen Rapaport</b> Nanophotonics with interacting exciton systems	Invited	10:30	10:50	<b>Andrey Miroshnichenko</b> Anapole excitation with dielectric nanoparticles	Invited
11:00	11:20	<b>Zhang-kai Zhou</b> Plasmon-Exciton Interaction in Metal-Two Dimensional Materials System	Invited	10:50	11:10	<b>Andrey Bogdanov</b> Bound state in the continuum in 1D chain of dielectric disks: theory and experiment	Invited	10:50	11:10	<b>Andrea Fratallocchi</b> Artificial intelligent camouflage materials: fundamentals and applications	Invited
11:20	11:40	<b>Timur Shegai</b> Modified excited states dynamics in the localized plasmon – exciton hybrids	Invited	11:10	11:30	<b>Nikolay Gippius</b> Controlling of resonances in photonic crystal slabs	Invited	11:10	11:30	<b>Alexey Basharin</b> Transparency effects in Metamaterials: Kerker conditions, anapole excitation, the role of multipoles	Invited
11:40	12:00	<b>Nicolas Stenger</b> Electron Energy-Loss Spectroscopy in plasmonic structures at the nanometre scale	Invited	11:30	11:45	<b>Mikhail Dunaevskiy</b> Visualization of spatial structure of optical modes in half-disk lasers	Oral	11:30	11:50	<b>Stefan Maier</b> Dielectric and low-dimensional-materials nanocavities for non-linear nanophotonics and sensing	Invited
				11:45	12:00	<b>Kirill Koshelev</b> Light-matter interaction between photonic bound states in the continuum and bright excitons in transition metal dichalcogenides	Oral	11:50	12:10	<b>Andrey Evlyukhin</b> Multipole approach for characterization of metasurface optical properties	Invited

12:10	13:10	<b>LUNCH</b>
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Session: "Nanoplasmonics structures and devices" [Hall 1]				Session: "Topologically protected structures and nontrivial optical systems" [Hall 2]				Session: "Advanced Metamaterials" [Hall 3]			
13:10	13:30	<b>Vladimir Drachev</b> Plasmon coupled super- and sub-radiance from dye shells	Invited	13:10	13:30	<b>Miguel A. Bandres</b> Topological Insulator Laser	Invited	13:10	13:30	<b>Andrei Lavrinenko</b> Laminae metamaterials: material platforms, properties and applications	Invited
13:30	13:50	<b>Tavakol Pakizeh</b> Optical Interaction Effects in Nanoplasmonic Antennas	Invited	13:30	13:50	<b>Vasily Klimov</b> Size and host-medium effects on topologically protected surface states in 3D optical waveguides	Invited	13:30	13:50	<b>Junsuk Rho</b> Recent progress in hyperbolic metamaterials: imaging, light trapping/focusing, negative refraction and active switching	Invited
13:50	14:10	<b>Evgeniya Smetanina</b> Magnetoplasmonics: magnetic control of light in the nanoscale landscapes	Invited	13:50	14:05	<b>Valerii Kozin</b> Topological states in arrays of polariton rings	Oral	13:50	14:10	<b>Alina Karabchevsky</b> Novel metamaterials on waveguides	Invited
14:10	14:25	<b>Nicolas Pazos-Perez</b> Plasmonic Macroscopic Structures: from linear assemblies to 3D structured super-crystals	Oral	14:05	14:20	<b>Anastasiia Pervishko</b> Effect of high-frequency pumping on thin-film topological insulators	Oral	14:10	14:30	<b>Vladimir Belotelov</b> Metamaterials lacking of time and space inversion symmetries	Invited
14:30	14:45	<b>Ivan Sinev</b> $2\pi$ steering of surface plasmon polaritons with silicon nanoantennas	Oral	14:20	14:35	<b>Dmitry Zhirihin</b> Experimental observation of spin-locked propagation of topological edge states in an open non-Hermitian metasurface	Oral	14:30	14:50	<b>Romain Fleury</b> Non-Hermitian metamaterials for light and sound	Invited
14:45	15:00	<b>Iliia Fradkin</b> Light scattering by resonant nanoparticles in a 2D lattice	Oral	14:35	14:50	<b>Maxim Gorlach</b> Analogue simulation of two-body quantum dynamics with classical setup	Oral	14:50	15:10	<b>Bogdan Ungureanu</b> Large scale inertial resonators and auxetic media for seismic wave shields	Invited
				14:50	15:05	<b>Dmitry Dobrykh</b> Experimental observation and control of nonlinear topological states	Oral				
15:10	16:00	<b>Coffee break and Poster Session I</b>									
Session: "Plasmonics II" [Hall 1]				Session: "Metasurfaces I" [Hall 2]				Session: "Nonlinear optics and strong light-matter interactions in low dimensional systems I" Session Organizers: A. Yulin & I. Iorsh [Hall 3]			
16:00	16:30	<b>Harald Giessen</b> Short-range surface plasmonics and its subfemtosecond dynamics	Keynote	16:00	16:15	<b>Sergey Dyakov</b> Circularly polarized thermal emission from chiral metasurface in the absence of magnetic field	Oral	16:00	16:15	<b>Alexey Yulin</b> Lasing and the formation of domain walls in the active systems with strong phonon-exciton interactions	Oral
16:30	16:45	<b>Ivan Lopushenko</b> Numerical simulation of electron energy loss spectroscopy accounting for nonlocal effect in plasmonic nanoparticles	Oral	16:15	16:30	<b>Frederik Walla</b> Direct near-field mapping of nano-sphere-excited leaky surface modes at anisotropic metasurface	Oral	16:15	16:30	<b>Vladimir Kulakovskii</b> Elliptically polarized exciton-polariton condensate in a semiconductor microcavity with a chiral photonic crystal slab	Oral
16:45	17:00	<b>Juan Domingo Baena Doello</b> Artificial Plasmas: Straight Strips Versus Zigzag Strips	Oral	16:30	16:50	<b>Thomas Pertsch</b> Tailoring of metasurfaces by positional and orientational disorder	Invited	16:30	17:00	<b>Konstantinos Lagoudakis</b> Tuning the Mollow Triplet Sideband Interactions in Double Lambda Systems of Individual Hole Spins	Keynote
17:00	17:15	<b>Alexey Shaymanov</b> Wood's anomaly for plasmonic biosensor based on 1D magneto-optical nanostructure	Oral	16:50	17:10	<b>Guixin Li</b> Nonlinear Photonic Metasurfaces	Invited	17:00	17:15	<b>Denis Sannikov</b> Room-temperature polariton lasing in dye-filled microcavities spanning the visible spectrum	Oral
17:15	17:30	<b>Martin Caldarola</b> Gold nanorods as absolute nanothermometers	Oral	17:10	17:25	<b>Alexander Musorin</b> Enhancement of the Intensity Magneto-Optical Effect in Magnetophotonic Metasurfaces	Oral	17:15	17:30	<b>Vladimir Dzyuba</b> Biexciton states in nanoheterostructures of dielectric quantum dots	Oral
17:30	17:50	<b>"NKT Photonics"</b>	Invited	17:25	17:40	<b>Vladimir Kornienko</b> Highly Reflective Mirror Based on Noble Metal 2D Babinet Metasurface	Oral	17:30	17:45	<b>Anton Zasedatelev</b> Single-step polariton condensation via vibronic resonances in organic microcavities	Oral

				17:40	18:00	<b>Masanobu Iwanaga</b> Recent progress in emittance-controlled optical metasurfaces	Invited				
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18:00	20:00	<b>WELCOME RECEPTION</b>									
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<b>Tuesday, September 18th</b>											
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9:00	9:40	<b>Andre Geim</b> <b>"2D Materials and Their Heterostructures: Introduction and Status"</b> <b>[Orange Hall]</b>									
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9:40	10:10	<b>Coffee break</b>									
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Session: "Quantum Phenomena" [Hall 1]			Session: "Graphene and 2D Materials I" Session Organizer: V. Volkov [Hall 2]			Session: "Bionanotechnology I" Session Organizer: M. Zyuzin [Hall 3]			Session: "MRI and microwave applications of metamaterials I" Session Organizer: S. Glybovski [Hall 4]		
10:10	10:25	<b>Andrei Eilstratov</b> Qubit system coupled to a cavity as a quantum metamaterial Oral	10:10	10:30	<b>Alberto G. Curto</b> 2D Semiconductor Nanophotonics Invited	10:10	10:40	<b>Ramon Alvarez-Puebla</b> SERS and Surface selection rules for diagnosis and prognosis Keynote	10:10	10:30	<b>Daniel Erni</b> Multi-functional RF coils for ultra-high field MRI based on 1D / 2D electromagnetic metamaterials Invited
10:25	10:40	<b>Sergei Remizov</b> Quantum effects amplification due to energy dissipation in parametrically driven qubit-cavity systems Oral	10:30	10:50	<b>Alexey Nikitin</b> Near-field optics with Van der Waals materials Invited	10:40	11:00	<b>Dmitry Gorin</b> Photonics and acoustic tools for imaging, navigation and activation of remote controlled theranostic carriers Invited	10:30	10:50	<b>Alexandre Vignaud</b> Fast and unconditionally safe in vivo MR protocol for home-made coil prototype assesement Invited
10:40	10:55	<b>Aleksandr Sergeev</b> Sensing and photocatalytic activity of zinc sulfide quantum dots based on charge transfer process to analyte molecule Oral	10:50	11:10	<b>Pavel Sorokin</b> New 2D materials with specific atomic structure and physical properties Invited	11:00	11:20	<b>Alexander Timin</b> Microcapsules as universal biocompatible platform for intracellular delivery of coding/noncoding nucleic acids Invited	10:50	11:05	<b>Anna Hurshkainen</b> Passive Decoupling Techniques in Ultra-High Field MRI Oral
10:55	11:15	<b>Alexey Ustinov</b> Quantum metamaterials made of superconducting qubit Invited	11:10	11:30	<b>Dmitry Svintsov</b> Active plasmonics in van der Waals heterostructures Invited	11:20	11:40	<b>Alexey Yashchenok</b> Layer-by-layer particulate systems as a potential platform for use in theranostics Invited	11:05	11:25	<b>Constantin Simovski</b> Decoupling of Dipole Antennas by a Split Loop Invited
11:15	11:35	<b>Oleg Kibis</b> Electronic properties of quantum rings dressed by a high-frequency electromagnetic field Invited	11:30	11:45	<b>Olga Polischuk</b> Double frequency plasmonic amplification of terahertz radiation in a periodical double-layer graphene Oral	11:40	11:55	<b>Mikhail V. Zyuzin</b> Hybrid capsules as drug delivery carriers into cells Oral	11:25	11:45	<b>Redha Abdeddaim</b> Impedance matrix approach for metamaterial MRI applications Invited
11:35	11:55	<b>Leonid Kuzmin</b> Single Photon Detector based on a Josephson Junction at 14 GHz for searching Galactic Axions and for Quantum Circuits Invited	11:45	12:00	<b>Oleg Kotov</b> Tunable resonance coupling in hybrid exciton-polariton structures based on 2D semiconductors Oral	11:55	12:10	<b>Anastasiia Kozlova</b> Polyelectrolyte Parg/DS submicrocapsules functionalized by magnetite nanoparticles as effective MR contrast agents Oral	11:45	12:05	<b>Denis Tihon</b> High impedance MRI tunnel analysis with integral-equation methods Invited

12:10	13:10	<b>LUNCH</b>									
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Session: "Nonlinear optics and strong light-matter interactions in low dimensional systems II" Session Organizers: A. Yulin & I. Iorsh [Hall 1]			Session: "Graphene and 2D Materials II" Session Organizer: V. Volkov [Hall 2]			Session: "Bionanotechnology II" Session Organizer: M. Zyuzin [Hall 3]			Session: "MRI and microwave applications of metamaterials II" Session Organizer: S. Glybovski [Hall 4]		
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13:10	13:40	<b>Pavlos Lagoudakis</b> Polariton Simulators: fundamentals and applications	Keynote	13:10	13:30	<b>Andrey Moskalenko</b> Driven dynamics of electrons interacting with light in graphene nanostructures	Invited	13:10	13:30	<b>Teresa Pellegrino</b> Magnetic Nanocrystals of cubic shape and their assemblies to tackle cancer	Invited	13:10	13:25	<b>Ekaterina Brui</b> Feasibility of metasurface assisted magnetic resonance spectroscopy at 1.5 T	Oral
13:40	14:00	<b>Ivan Iorsh</b> Electrical control over the statistics of the transmitted radiation via the quantized Stark effect in the quantum dot in a waveguide system.	Invited	13:30	13:50	<b>Bjarke Jørgensen</b> Graphene based broadband photodetectors for food inspections	Invited	13:30	13:50	<b>Susana Carregal Romero</b> Multiresponsive nanocarriers for drug delivery: In vitro applications and current challenges for their validation	Invited	13:25	13:45	<b>Tryfon Antonakakis</b> On the contribution of a meta atom to the ultimate intrinsic signal-to-noise ratio at ultra-high field strength	Invited
14:00	14:20	<b>Alexander Poddubny</b> Unidirectional Third Harmonic Generation from Photonic Topological States	Invited	13:50	14:10	<b>Yury Stebunov</b> 2D Materials for Surface Plasmon Resonance Biosensing	Invited	13:50	14:10	<b>Johannes Frueh</b> Gold and Silver Nanoparticle Blinking for Stochastic Optical Reconstruction Microscopy using Standard Microscope Cameras	Invited	13:45	14:00	<b>Alexey Slobozhanyuk</b> Metasurfaces applications in magnetic resonance imaging	Oral
14:20	14:40	<b>Anton Nalitov</b> Optical bifurcations in polariton condensates	Invited	14:10	14:30	<b>Valentyn Volkov</b> Hybrid graphene-nanometallic structures	Invited	14:10	14:30	<b>Igor Meglinski</b> Orbital angular momentum of light for the diagnosis of brain tissues	Invited	14:00	14:15	<b>Mikhail Zubkov</b> Small animal large field of view magnetic resonance imaging with metamaterial-inspired resonator	Oral
14:40	15:00	<b>Ivan Shelykh</b> Exciton- exciton interactions and optical nonlinearities in TMD materials	Invited	14:30	15:00	<b>Victor Ryzhii</b> Physics of graphene-based electron and optoelectronic devices: Can these devices be superior?	Keynote	14:30	14:45	<b>Aleksandra Shulga</b> Fluorescent properties of Gd-doped ZnO nanoporous networks & its application in optical biosensing	Oral	14:15	14:35	<b>Marc DUBOIS</b> Kerker Effect in Ultra High Field Magnetic Resonance Imaging	Invited
								14:45	15:00	<b>Mikhail Zhukov</b> Investigation of mechanical and topographic properties of living cells in normal and malignant transformation by means of atomic-force microscopy with high-aspect probes	Oral	14:35	14:50	<b>Alena Shchelokova</b> A new quadrature annular meta-resonator for 3 T MRI	Oral
												14:50	15:10	<b>Alexander Popugaev</b> A Technique for Efficient Design of Distributed Circuits for MRI Applications	Invited
15:10	16:00	<b>Coffee break and Poster Session II</b>													
<b>Session: "Nonlinear optics and strong light-matter interactions in low dimensional systems III" Session Organizers: A. Yulin &amp; I. Iorsh</b>				<b>Session: "Graphene and 2D Materials III" Session Organizer: V. Volkov</b>				<b>Session: "MRI and microwave applications of metamaterials III" Session Organizer: S. Glybovski</b>							
[Hall 1]				[Hall 2]				[Hall 4]							
16:00	16:30	<b>Maurice Skolnick</b> On-chip Quantum Optics enabled by Nano-Photonic Confinement in III-V Systems	Keynote	16:00	16:30	<b>Zhigang Chen</b> Valley-mediated Phenomena in Photonic Graphene	Keynote	16:00	16:15	<b>Georgiy Solomakha</b> RF-coil for UHF MRI based on hybridized modes of paired dipoles resonator	Oral				
16:30	16:50	<b>Igor Chestnov</b> Nonlinear phenomena in exciton-polariton condensates	Invited	16:30	16:50	<b>Elena Zhukova</b> Charge transport mechanisms in macroscale CNT films	Invited	16:15	16:30	<b>Stanislav Glybovski</b> Magnetic Resonance Microscopy at 17 Tesla with a New All-Dielectric Probe	Oral				
16:50	17:10	<b>Evgeny Sedov</b> Zitterbewegung of exciton-polaritons in microcavities with the spin-orbit interaction	Invited	16:50	17:10	<b>Giuseppe Della Valle</b> Anisotropic optical functionalization of MoS2 nanosheets via substrate pattern design	Invited	16:30	16:50	<b>Juan Domingo Baena Doello</b> The Physics of Self-Complementary Metasurfaces	Invited				
17:10	17:30		Invited	17:10	17:30	<b>Yahya Moubarak Meziani</b> Asymmetric dual grating gate graphene field effect transistors for detection of terahertz radiations.	Invited	16:50	17:10	<b>Dmitry Tatarnikov</b> Periodic Structures, High Impedance and Semitransparent Surfaces in Antennas for Centimeter and Millimeter Precision of Positioning with the Global Navigation Satellite Systems	Invited				
17:30	17:50		Invited	17:30	17:45	<b>Leonid Chernozatonskii</b> BILAYER GRAPHENES WITH ANTIDOTS: STRUCTURES, PROPERTIES AND APPLICATIONS	Oral	17:10	17:25	<b>Irina Munina</b> Unit cell for 1-bit reconfigurable transmitarray with circular polarization	Oral				

17:50	18:05	<b>Vanik Shahnazaryan</b> Cooling and squeezing in nonlinear dissipative opt...	Oral
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17:45	18:00	<b>Aleksandr Petrov</b> Electron hydrodynamic instabilities stimulated by asymmetry	Oral
18:00	18:15	<b>Mikhail Morozov</b> Gain of terahertz plasmons in a double-layer graphene	Oral

17:25	17:40	<b>Pavel Turalchuk</b> Direction of Arrival Estimation for Retrodirective Rotman Lens Antenna Array	Oral
17:40	17:55	<b>Anna Andreychenko</b> Wireless metasurface coil versus comparable conventional birdcage resonator: RF safety and transceiver efficiency aspects	Oral

**Wednesday, September 19th**

9:00	9:40	<b>Sven Hoefling</b> "Quantum dot single photon sources for quantum technologies" [Orange Hall]	
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9:40	10:10	<b>Coffee break</b>	
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Session: "Nonlinear optics and strong light-matter interactions in low dimensional systems IV" Session Organizers: A. Yulin & I. Iorsh [Hall 1]		Session: "Optomechanical manipulation: fundamentals and applications I" Session Organizers: P. Ginzburg & A. Shalin & M. Petrov [Hall 2]		Session: "Nanophotonics I" [Hall 3]		Session: "All-dielectric nanophotonics I" [Hall 4]									
10:10	10:40	<b>Pavlos Savvidis</b> Lattices of Spin-polarised Interacting Polariton Condensates: A novel quantum simulator platform.	Keynote	10:10	10:30	<b>Manuel Marques</b> Dynamics of electric dipoles in fluctuating light fields: From gravity like interactions to accelerated expansion	Invited	10:10	10:25	<b>Evgeni Bezus</b> Integrated W-type structure for spectral and spatial filtering of optical radiation propagating in a slab waveguide	Oral	10:10	10:30	<b>Andrey Sukhorukov</b> Shaping and imaging quantum light with metasurfaces	Invited
10:40	11:00	<b>Dmitry Krizhanovskii</b> Exciton-polaritons in semiconductor microcavities with 2D materials	Invited	10:30	10:50	<b>Sergey Sukhov</b> The zoo of nonconservative optical forces	Invited	10:25	10:40	<b>Babak Vosoughi Lahijani</b> Bloch Surface Waves Fabry- Pérot Nanocavity	Oral	10:30	10:50	<b>Irina Khromova</b> Polarity of Fano resonances in dielectric particles near conductive surfaces	Invited
11:00	11:20	<b>Leonid Butov</b> Indirect excitons	Invited	10:50	11:10	<b>Alexey Maslov</b> Resonant optical forces in microspherical photonics	Invited	10:40	11:10	<b>Dragomir Neshev</b> Dielectric Metasurfaces: fundamentals and applications	Keynote	10:50	11:05	<b>Justus Ndukaife</b> New frontiers for nanoparticle trapping and manipulation with designer thermoplasmonic metasurfaces	Oral
11:20	11:40	<b>Sebastian Klembt</b> Polariton lattices: From photonic simulators to topological effects	Invited	11:10	11:30	<b>Alexander Shalin</b> Tractor beams at metamaterial substrates	Invited	11:10	11:25	<b>Alexander Dostovalov</b> The evidence of the role of surface plasmon polaritons in formation of femtosecond highly-regular laser-induced periodic structures on Cr films	Oral	11:05	11:20	<b>Leonid Doskolovich</b> High-Q resonances supported by a single dielectric ridge on the surface of a slab waveguide	Oral
11:40	12:00	<b>Anatoly Kamchatnov</b> Oblique solitons in atomic and polariton condensates	Invited	11:30	12:00	<b>Norbert Scherer</b>	Keynote	11:25	11:40	<b>Sergey Novikov</b> Highly stable silver nanoparticles for SERS applications	Oral	11:20	11:35	<b>Zhanna Dombrovskaya</b> All-dielectric metasurface filters for mid-infrared range	Oral
								11:40	11:55	<b>Charles Downing</b> On nonreciprocal coupling in plasmonics	Oral	11:35	11:50	<b>George Zograf</b> Resonant Non-plasmonic Nanostructures as a Versatile Tool for Optical Heating and Thermometry at Nanoscale	Oral
								11:55	12:10	<b>Avesh Kumar</b> Control of plasmonic nanostructures for high performance applications	Oral	11:50	12:05	<b>Muhammad Afnan Ansari</b> Highly Efficient Visible Hologram through Dielectric Metasurface	Oral

12:10	13:10	<b>LUNCH</b>			
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Session: "Nonlinear optics and strong light-matter interactions in low dimensional systems V " Session Organizers: A. Yulin & I. Iorsh [Hall 1]		Session: "Optomechanical manipulation: fundamentals and applications II" Session Organizers: P. Ginzburg & A. Shalin & M. Petrov [Hall 2]		Session: "Nanophotonics II" [Hall 3]		Session: "Theory of Complex Structures and Metamaterials II" [Hall 4]	
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13:10	13:40	<b>Guillaume Malpuech</b> Exciton-Polariton based topological photonics and topological lasers	Keynote	13:10	13:30	<b>Ognjen Ilic</b> Optomechanics and Complex Dynamics Across Many Length Scales: From Structured Nanoparticles to Cosmic Lightsails	Invited	13:10	13:30	<b>Alexey Maslov</b> Label-Free Super-Resolution on the Rise	Invited	13:10	13:30	<b>Vladimir Ulyantsev</b> Genetic Algorithms for Complex Structures Inference	Invited
13:40	14:00	<b>Oleg Egorov</b> Ultrafast nonlinear phenomena in polaritonic wires	Invited	13:30	13:50	<b>Shangran Xie</b> Optical trapping and binding of microparticles in hollow-core photonic crystal fibres	Invited	13:30	13:50	<b>Andrey Moskalenko</b> Tracing pulsed squeezed light in the mid-infrared with subcycle resolution	Invited	13:30	13:50	<b>Stanislav Maslovski</b> Conjugate impedance matched metamaterials: Physical modeling and wave interaction effects	Invited
14:00	14:20	<b>Vadim Kovalev</b> Nonlinear valley Hall transport in two-dimensional Dirac semiconductors	Invited	13:50	14:10	<b>Viet Giang Truong</b> Efficient Micro- and Nanoparticle Trapping with Ultrathin Fibres and Plasmonic Tweezers	Invited	13:50	14:10	<b>Sergei Tikhodeev</b> Resonant states in chiral photonic structures to control the circular polarization of emitted photons	Invited	13:50	14:10	<b>Vladimir Anisimov</b> Strongly correlated materials from ab-initio calculations	Invited
14:20	14:40	<b>Nina Voronova</b> Anisotropic superfluidity in organic microcavities	Invited	14:10	14:30	<b>Pavel Ginzburg</b> Mirco and nano tools for optomechanical manipulation	Invited	14:10	14:40	<b>Nicolas Bonod</b> Resonant interaction of light with open optical cavities	Keynote	14:10	14:30	<b>Kestutis Staliunas</b> Management of light patterns based on local Hilbert transform	Invited
14:40	15:00	<b>Guillaume Malpuech</b> Non-adiabatic Anomalous Hall Effect for exciton-polaritons	Invited	14:30	14:50	<b>Pavel Zemanek</b> Experimental stochastic systems based on optical forces	Invited	14:40	15:00	<b>Constantin Simovski</b> Light Trapping In Thin-Film Solar Cells: Gain in Spite of Defects	Invited	14:30	14:50	<b>Carsten Rockstuhl</b> Homogenization of metamaterials with strong spatial dispersion	Invited
				14:50	15:05	<b>Mikhail Petrov</b> Binding and self-organization of nanoparticles with nanofiber guiding mode	Oral					14:50	15:10	<b>Ivan Fernandez-Corbaton</b> Using symmetry and symmetry breaking in nanophotonic design	Invited

15:10 16:00 **Coffee break and Poster Session III**

Session: "Nonlinear and Ultrafast Phenomena"				Session: "Graphene and 2D Materials IV"				Session: "Advanced Optical Materials"							
[Hall 1]				[Hall 2]				[Hall 3]							
16:00	16:20	<b>Egor Muljarov</b> Phonon-induced dephasing in quantum dots coupled to an optical microcavity	Invited	16:00	16:20	<b>Denis Bandurin</b> Electron hydrodynamics in graphene	Invited	16:00	16:30	<b>Aldo Di Carlo</b> Bidimensional nanomaterials for perovskite photovo...	Keynote				
16:20	16:35	<b>Valentin Milichko</b> Second harmonic generation from metal-organic framework derivatives	Oral	16:20	16:35	<b>Ivan Oladyshkin</b> Landau-Zener transitions in graphene induced by THz pulse	Oral	16:30	16:50	<b>Sergey Makarov</b> Novel Nanophotonic Designs based on Halide Perovskite Nanostructures	Invited				
16:35	16:50	<b>Viacheslav Snigirev</b> Ultrafast dynamics of light scattering in resonant GaAs nanoantennas	Oral	16:35	17:05	<b>Marco Polini</b> Topological and quantum plasmonics	Keynote	16:50	17:10	<b>Ilya Rodionov</b> High-Q nanophotonics with silver-empowered plasmon...	Invited				
16:50	17:05	<b>Alexander Shesterikov</b> Non-classical plasmon states generation in nonlinear spaser systems	Oral	17:05	17:20	<b>Sergey Pavlov</b> Graphene electrochemistry: edge vs. basal plane sites	Oral	17:10	17:25	<b>Tavakol Pakizeh</b> The interaction electromagnetic waves in optical and millimetre wave ranges with VO2 nanoparticles and films, prospective for nano-photonics, nano-antennas and sensors	Oral				
17:05	17:20	<b>Elizaveta Melik-Gaykazyan</b> Silicon nanoparticles for nonlinear frequency conversion of mid-IR radiation	Oral	17:20	17:35	<b>Denis Fateev</b> The effect of the strong spatial inhomogeneity of the electric field on plasmon rectification of terahertz radiation in graphene	Oral	17:25	17:40	<b>Daria Ignatyeva</b> Tunable optical addressing of layers in GdFeCo bilayer structure	Oral				
17:20	17:35	<b>Sergei Kozlov</b> Self-focusing does not occur for few-cycle pulses	Oral	17:35	17:50	<b>Raul Rodriguez</b> Reduced-graphene Oxide Circuits by Light: Going Beyond the Diffraction Limit	Oral	17:40	17:55	<b>Ekaterina Tiguntseva</b> Resonant effects in nanoscale light sources based on hybrid perovskites	Oral				

9:00	9:40	<b>Mikhail Katsnelson</b> <b>"Theory of magnetic interactions in real materials"</b> <b>[Orange Hall]</b>					
9:40	10:10	<b>Coffee break</b>					
<b>Session: "Single photon detection, generation and applications I"</b> <b>Session Organizers: A. Akimov &amp; D. Zuev &amp; P. Kapitanova</b> <b>[Hall 1]</b>		<b>Session: "Advanced methods of nanofabrication I"</b> <b>[Hall 2]</b>		<b>Session: "Theory of Complex Structures and Metamaterials II"</b> <b>[Hall 3]</b>			
10:10	10:40	<b>Philip Hemmer</b> Future of fluorescent nanodiamonds (and phosphors)	<b>Keynote</b>	10:10	10:30	<b>Elizaveta Semenova</b> Epitaxy of Quantum Dots operating in the 1.55 $\mu\text{m}$ wavelength range for device applications	Invited
10:40	11:00	<b>Niko Nikolay</b> Plasmon-empowered Non-Classical Light Sources	Invited	10:30	10:50	<b>Takashi Nakajima</b> Controlled morphological and optical properties of metal-polymer nanocomposite films fabricated by a mid-infrared laser	Invited
11:00	11:20	<b>Aleksey Fedorov</b> New frontiers for quantum networks	Invited	10:50	11:05	<b>Ruggero Verre</b> High index dielectric metasurfaces and colloidal solutions: from fabrication to application	Oral
11:20	11:40	<b>Cheng Wang</b> Nonlinear photonics in integrated lithium niobate platform	Invited	11:05	11:20	<b>Alexey Bolshakov</b> GaN nanowires on Si (111) substrates via molecular beam epitaxy: growth, electronic and optical properties	Oral
11:40	12:00	<b>Petr Siyushev</b> Fourth-group-elements-based color centers in diamond as a novel qubit candidates	Invited	11:20	11:35	<b>Anatoly Pushkarev</b> Cesium lead mixed-halide perovskites in polymer matrix	Oral
				11:35	11:50	<b>Valentin Milichko</b> Nanometer scale metal-organic frameworks derivatives for optical application	Oral
				11:50	12:05	<b>Vladimir Bochenkov</b> Chiral comma-shaped gold nanoparticles: fabrication and refractive index sensitivity	Oral
10:10	10:25	<b>Yuriy Belyayev</b> Analytical solutions for multi-wave transfer matrices in layered structures	Oral	10:25	10:40	<b>Roman Polozkov</b> Ab-initio study of electronic properties of a two-dimensional array of carbon nanotubes	Oral
10:40	11:10	<b>Su-Huai Wei</b> Inhomogeneous Strain-induced Spin-splitting in Bent Zigzag Graphene Nanoribbons	<b>Keynote</b>	11:10	11:25	<b>Giorgio Gnecco</b> Metamaterial filter design via surrogate optimization	Oral
11:25	11:40	<b>Maria Perel</b> Quasiphotons in graphen	Oral	11:40	11:55	<b>Denis Novitsky</b> Light dynamics in PT-symmetric multilayers: Phase transition, nonreciprocity, and propagation direction locking	Oral
11:55	12:10	<b>Evgeny Glushkov</b> An analytically based computer model for evaluating effective elastic properties of nitride nanowire-polymer compositions using laser-generated surface acoustic waves	Oral				
12:10	13:10	<b>LUNCH</b>					
<b>Session: "Single photon detection, generation and applications II"</b> <b>Session Organizers: A. Akimov &amp; D. Zuev &amp; P. Kapitanova</b> <b>[Hall 1]</b>		<b>Session: "Advanced methods of nanofabrication II"</b> <b>[Hall 2]</b>		<b>Session: "Active and nonlinear metasurfaces I"</b> <b>Session Organizers: I. Staude &amp; M. Shcherbakov</b> <b>Session Chair: I. Staude</b> <b>[Hall 3]</b>			
13:10	13:30	<b>Ilya Radko</b> Modification of the optical readout fidelity of single electron spins at NV centers in diamond	Invited	13:10	13:30	<b>Ovidio Y. Peña Rodríguez</b> Tailoring the optical response of plasmonic nanoparticles with femtosecond laser pulses	Invited
13:10	13:40	<b>Gennady Shvets</b> Topological Photonics: From Microwaves to Nanoscale	<b>Keynote</b>				

13:30	13:50	<b>Igor Vlasov</b> Luminescent nanodiamonds as a material platform for production of single photon emitters	Invited	13:30	13:45	<b>Denis Zhigunov</b> Near-IR resonant response of Ge microparticles fabricated by femtosecond laser printing	Oral	13:40	14:10	<b>Andrey Fedyanin</b> Resonant nonlinear optics in all-dielectric nanostructures and metasurfaces	Keynote
13:50	14:10	<b>Wei Fang</b> High-purity, electrically-driven, and room-temperature single-photon sources	Invited	13:45	14:00	<b>Fedor Grigoriev</b> Glancing angle deposition of optical coatings: results of the full-atomistic simulation	Oral	14:10	14:30	<b>Viktoriia Babicheva</b> Metasurfaces with hyperbolic-medium multipole resonators	Invited
14:10	14:30	<b>Sejeong Kim</b> Quantum Emitters in Flatland	Invited	14:00	14:15	<b>Aleksandr Kuchmizhak</b> Pulsed laser fabrication of advanced plasmonic nanostructures with structured light	Oral	14:30	14:50	<b>Joerg Schilling</b> Spontaneous emission enhancement of Ge(Si) quantum dots embedded in silicon Mie-resonators	Invited
14:30	14:50	<b>Pavel Baranov</b> Spin colour centres in SiC as a material platform for quantum photonics and communications, sensing and information processing at ambient conditions	Invited	14:15	14:30	<b>Alina Lyuleeva</b> Surface Engineering of Two-Dimensional Hydrogenated Silicon Nanosheets for Tailored Applications	Oral	14:50	15:10	<b>Bigeng Chen</b> Merging plasmonics, silicon photonics and ultrafast control at the nanoscale	Invited
				14:30	14:45	<b>Konstantine Nadaraia</b> Corrosion properties of composite coatings on AMg3 alloy surface	Oral				
				14:45	15:00	<b>Nail Inogamov</b> Thermomechanical ablation caused by ultrashort action of laser excited plasmonic field	Oral				
15:10	15:40	<b>Coffee break</b>									
<b>Session: "Single photon detection, generation and applications III"</b> <b>Session Organizers: A. Akimov &amp; D. Zuev &amp; P. Kapitanova</b> <b>[Hall 1]</b>				<b>Session: "Metamaterials I"</b> <b>[Hall 2]</b>				<b>Session: "Active and nonlinear metasurfaces II"</b> <b>Session Organizers: I. Staude &amp; M. Shcherbakov</b> <b>Session Chair: M. Shcherbakov</b> <b>[Hall 3]</b>			
15:40	16:10	<b>Jörg Wrachtrup</b> Quantum Optics with Highly Coherent Photons	Keynote	15:40	15:55	<b>Olga Boyko</b> High Frequency Elastic Properties of Nitride Nanowire-based Structures	Oral	15:40	16:00	<b>Giuseppe Leo</b> AlGaAs nonlinear nanophotonics: harmonic generation with grating-assisted and hybrid nanostructures	Invited
16:10	16:30	<b>Georgiy Astakhov</b> Engineering of highly coherent spin centers in silicon carbide	Invited	15:55	16:10	<b>Irina Kolmychek</b> Second harmonic generation in hyperbolic metamaterials	Oral	16:00	16:20	<b>Costantino De Angelis</b> AlGaAs nanoantennas: harmonic generation and photon management at the nanoscale	Invited
16:30	16:50	<b>Snezana Lazic</b> Surface acoustic wave modulation of single photon emission from GaN/InGaN nanowire quantum dots	Invited	16:10	16:25	<b>Alexei Kiselev</b> Orientational Kerr effect in liquid crystal ferroelectrics and modulation of partially polarized light	Oral	16:20	16:40	<b>Isabelle Staude</b> Mie-resonant semiconductor metasurfaces for active, tunable and nonlinear photonics	Invited
16:50	17:05	<b>Dmitry Obydenov</b> Saturation of fluorescence from NV centers in Mie-resonant diamond particles	Oral	16:25	16:40	<b>Igor Nefedov</b> Lateral radiative forces exerted by evanescent elds along a hyperbolic metamaterial slab	Oral	16:40	17:00	<b>Frank Setzpfandt</b> Second-Harmonic Generation in Dielectric Metasurfaces	Invited
17:05	17:20	<b>Polina Kapitanova</b> Circularly polarized antenna for coherent manipulation of NV-centers in diamond	Oral	16:40	16:55	<b>Varvara Zubyuk</b> Intensity-Dependent Reflectance Modulation of Femtosecond Laser Pulses in GaAs Nanocylinders With Magnetic Resonances	Oral	17:00	17:20	<b>Niels Verellen</b> Silicon optical antennas – mode distributions and directionality	Invited
17:20	17:35	<b>Anastasia Zalogina</b> Emission rate studying through nanodiamonds with embedded nitrogen vacancy centers	Oral	16:55	17:10	<b>Romain Dezert</b> Isotropic Huygens sources made of clusters of nanoparticles for metasurfaces applications	Oral	17:20	17:40	<b>Maxim Shcherbakov</b> Photonics of time-varying metasurfaces	Invited



17:10	17:25	<b>Andrey Sayanskiy</b> Experimental realization of the new Huygens' metasurface for full phase control.	Oral
17:25	17:40	<b>Vadim Levin</b> Fractal microstructure of carbon nanocomposites observed concurrently by impulse acoustic microscopy and micro-focus X-ray computed tomography techniques	Oral

Friday, September 21st

9:00	9:40	<b>Javier Garcia de Abajo</b> <b>"Quantum Physics with Plasmons in Graphene and other Atomic-Scale Systems"</b> <b>[Orange Hall]</b>									
9:40	10:10	<b>Coffee break</b>									
<b>Session: "THz Technologies and Applications"</b> <b>[Hall 1]</b>		<b>Session: "Metasurfaces I"</b> <b>[Hall 2]</b>		<b>Session: "Spintronics and spin-dependent phenomena in magnetic solids"</b> <b>Session Organizers: D. Yudin &amp; O. Eriksson</b> <b>Session Chair: Prof. O. Eriksson</b> <b>[Hall 3]</b>							
10:10	10:30	<b>Mikhail Portnoi</b> Terahertz transitions in carbon nanotubes and graphene nanoribbons	Invited	10:10	10:30	<b>Qiong He</b> Multifunctional, High-efficiency, Tunable Metasurfaces to Control Electromagnetic Waves	Invited	10:10	10:30	<b>Oleg Tretiakov</b> Skyrmions and Antiskyrmions in Antiferromagnets	Invited
10:30	10:50	<b>Ilya Shadrivov</b> Dielectric metasurfaces for Terahertz wave manipulation	Invited	10:30	10:50	<b>Mengxin Ren</b> Functional Metasurfaces for Linear and Nonlinear Control of Light	Invited	10:30	10:50	<b>Anna Delin</b> Spin dynamics and spin-heat interaction in low-dimensional systems	Invited
10:50	11:05	<b>Vladimir Romyantsev</b> HgCdTe based quantum well heterostructures for long-wavelength lasers operating in 5 - 15 THz range	Oral	10:50	11:10	<b>Maxim Gorkunov</b> Liquid-crystal-tunable optical metasurfaces	Invited	10:50	11:10	<b>Sergey Nikitov</b> Magnonics- new chapter of spintronics and magnetoelectronics	Invited
11:05	11:20	<b>Alexandr Yachmenev</b> Sn-nanowires in GaAs matrix and their sub- and terahertz applications	Oral	11:10	11:25	<b>Thomas Sturges</b> Manipulating Type-I and Type-II Dirac Polaritons in Cavity-Embedded Honeycomb Metasurfaces	Oral	11:10	11:25	<b>Nikolai Khokhlov</b> Optically-excited spin waves in thin epitaxial Gallenol films with strong in-plane magnetic anisotropy	Oral
11:20	11:35	<b>Vasily Gerasimov</b> Using submicron dielectric coatings to reduce terahertz surface plasmon losses on metals	Oral	11:25	11:40	<b>Maxim Komlenok</b> Effect of grain orientation on properties of diamond/graphite metasurface fabricated by laser direct-write	Oral	11:25	11:40	<b>Dmitry Zezyulin</b> Nonlinear ring-shaped waves in spinor polariton condensates	Oral
11:35	11:50	<b>Mario Ferraro</b> Intersubband plasmons induced negative refraction at THz frequency in heterostructured semiconductor metamaterials	Oral	11:40	11:55	<b>Dmitry Chubich</b> 2D and 2.5D plasmonic metastructures for surface-enhanced infrared absorption applications: fabrication and properties	Oral				
11:50	12:05	<b>Valerii Trukhin</b> Terahertz generation by periodic arrays of GaAs/AlGaAs core/shell nanowires	Oral	11:55	12:10	<b>Oleh Yermakov</b> Eigenmodes degeneracy with Huygens-like all-dielectric metasurface	Oral				
12:10	13:10	<b>LUNCH</b>									

Session: "Metamaterials II" [Hall 1]				Session: "All-dielectric nanophotonics II" [Hall 2]				Session: "Spintronics and spin-dependent phenomena in magnetic solids" Session Organizers: D. Yudin & O. Eriksson [Hall 3]			
13:10	13:30	<b>Tao Li</b> Dispersion engineered optical meta-devices	Invited	13:10	13:30	<b>Arkady Chipouline</b> Passive and active toroidal structures	Invited	13:10	13:30	<b>Carolin Schmitz-Antoniak</b> Magnetite at the nanoscale – magnetism, electronic structure, and the Verwey transition	Invited
13:30	13:50	<b>Xiangping Li</b> Structured surfaces for structured light and multi-functionalities	Invited	13:30	13:50	<b>Dmitry Pidgayko</b> Direct imaging of isofrequency contours in all-dielectric optical metasurface	Oral	13:30	13:50	<b>Maria Aranzazu (Arantxa) Fraile Rodriguez</b> Stress-induced Nanoscale Magnetic Domain Configurations Imprinted in Ni Thin Films by Proximity to V2O3	Invited
13:50	14:10	<b>Irina Khromova</b> Metamaterials for Wireless Power and Data Transfer	Invited	13:50	14:05	<b>Anar Ospanova</b> Perforated all-dielectric anapole metamaterials	Oral	13:50	14:10	<b>Olof Karis</b> Time resolved studies of magnetisation dynamics with elemental specificity	Invited
14:10	14:30	<b>Aleksandr Markvart</b> Metamaterials-inspired resonator for wireless power transfer systems	Oral	14:05	14:20	<b>Kirill Okhlopov</b> Optical coupling between resonant dielectric nanoparticles and dielectric waveguides probed by third harmonic generation microscopy	Oral				
14:30	14:45	<b>Konstantin Vytovtov</b> Unusual penetration effect in ferromagnetics. Negative reflection under tangential wave incidence	Oral	14:20	14:35	<b>Nikita Olekhno</b> Generation of surface plasmon-polariton pairs by a nonlinear nanoparticle	Oral				
14:45	15:00	<b>"Inscience" company</b>	Invited	14:35	14:50	<b>Ivan Mukhin</b> Optical nanoantennas excited by tunnel electrons under the STM tip	Oral				
15:00	15:10	<b>Closing Ceremony</b>									
16:00	21:00	<b>Social Program</b>									

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