

International Conference on Problems of Strongly Correlated and Interacting Systems

May 28 - 31, 2014 - Saint-Petersburg, Russia

Program

28.05.2014 Wed		Speaker	Title of lecture
09:15	09:50	Thomas Pohl	Strong light-matter correlations in cold Rydberg gases
09:50	10:25	Tero Heikkilä	High-temperature surface superconductivity in topological flat band systems
10:25	11:00	Gora Shlyapnikov	Many-body physics with quantum gases in disorder
11:00	11:30	Coffee Break	
11:30	12:05	Yuri Rubo	Symmetry breaking in condensation of exciton-polaritons
12:05	12:40	Alexey Kavokin	Bosonic lasers
12:40	13:00	Davide Rossini	Optimal persistent currents for interacting bosons stirred on a ring
13:00	14:30	Lunch	
14:30	15:05	Sven Hoefling	Polariton condensation in deep-confinement microcavity-lattices
15:05	15:40	Joerg Schmiedmayer	Relaxation and thermalization in an isolated quantum system
15:40	16:15	Sergey G. Tikhodeev	Artificial chiral micro- and nanostructures
16:15	16:35	Pjotrs Grišins	Tunnel cooling of one-dimensional Bose-Einstein quasicondensates
16:35	17:00	Coffee Break	
17:00	17:35	Mikhail Baranov	Majorana fermions in cold atom systems: creation, manipulation, and quantum computation
17:35	18:10	Atac Imamoglu	Interfacing single photons and condensed-matter systems
19:30	Welcoming cocktail (Petro Palace Hotel)		

29.05.2014 Thu		Speaker	Title of lecture
09:00	09:35	Mikhail Portnoi	Condensate of two-particle vortices in Dirac-Weyl semimetals
09:35	10:10	Fabrice Laussy	Quantum optics with bundles of photons
10:10	10:45	Alexander Alodjants	Quantum optics and thermalized effects with confined polaritons in low-dimensions
10:45	11:05	Oxana Mishina	Towards the light-phonon quantum interface with an atomic array in a cavity
11:05	11:35	Coffee Break	
11:35	12:10	Mikhail Glazov	Fluctuations in quantum microcavities: coherence and spin noise
12:10	12:30	Carlo Levi	The biosolar project
12:30	12:50	Igor Mazets	Relaxation of phonons in a one-dimensional atomic quasicondensate
12:50	14:30	Lunch	
14:30	15:05	Ivan Shelykh	Interaction effects in polariton transport
15:05	15:25	Helgi Sigurðsson	Vortices in spinor cold exciton condensates with spin-orbit interaction
15:25	15:45	Kristin Kristinsson	THz lasing from dipolaritons
15:45	16:05	Kristín Björg Arnardóttir	One-dimensional Van Hove polaritons
16:05	16:25	Oleksandr Kyriienko	Unconventional single photon emitter with dipolaritons
16:25	17:05	Coffee Break	
17:05	17:40	Elena Del Valle	Theory and applications of time- and frequency-resolved quantum correlations
17:40	18:00	Yulia Shchadilova	Capturing Polaronic Physics for the Impurities in BEC with Generalized Coherent States Approach

30.05.2014 Fri		
9:15 — departure from the hotel		Excursion to Petrodvorets — Fountain Cascades and Palaces!!!
		Departure at 9:15 from the hotel. At about 15:15 getting back to the hotel.
16:00	16:45	Substantial Coffee-break
16:45 – 18:45		Poster Session
19:15 — gathering in the Petro Palace hall		Social Dinner in the Restaurant — 'Russkaya ryumoch'naya' (Vodkaroom)
		«History of Russian Vodka» Museum exposition

31.05.2014 Sat		Speaker	Title of lecture
09:00	09:35	Alberto Bramati	Quantum fluid phenomena and quantum devices with microcavity polaritons
09:35	09:55	Charles Downing	Magnetic field induced confinement-deconfinement transitions in Dirac materials
09:55	10:15	Lorenzo Dominici	Evolution of injected full and half vortices in a polariton fluid
10:15	10:35	Anna Lyamkina	Plasmon-mediated energy transfer in the ensemble of self-assembled InAs/AlGaAs Qds
10:35	10:55	Dmitri Kupriyanov	Coherent control of light propagation in an ensemble of cold atoms in diffusion regime
10:55	11:30	Coffee Break	
11:30	12:05	Alexander Lichtenstein	Correlation effects near Van Hove singularities in triangular lattice
12:05	12:40	Vladimir Fomin	Vortex dynamics in rolled-up superconductor nanostructures
12:40	13:00	Alexandra Sheremet	Cooperative interaction between light and spatially dense multilevel atomic system
13:00	14:30	Lunch	
14:30	15:05	Emanuel Gull	Equilibrium and non-equilibrium properties of quantum impurities: Insight from diagrammatic Monte Carlo methods on the real-time contour
15:05	15:40	Leonardo Fallani	Multi-component one-dimensional liquids of fermions
15:40	16:10	Simon Mitchinson	Cryofree dilution refrigerators for quantum device characterization (Oxford Instruments Omicron Nanoscience)
16:10	16:40	Coffee Break	
16:40		Closing of the Conference. Best Poster Award. Conference Photo.	