

## The conference agenda (MNNSI-2017)

**09.11.2017 (Thursday), Suzdal, Puschkarskaya sloboda**

- 14.00-17.00**     *Check-in. Registration*  
**17.00-20.00**     *Posters section, snack-party*  
**20.00**             Dinner

**10.11.2017 (Friday), Suzdal, Puschkarskaya sloboda**

- 10.00-10.30**     *Open ceremony*  
**10.30-12.00**     *Plenary talks:*  
**10.30-11.15**     Global Planetary Transformations and the new Human-Nature relations: challenges and opportunities for science  
*Prof. Valentini Riccardo – plenary*  
*Tuscia University, Viterbo*  
**11.15-12.00**     Bosonic lasers: present and future  
*Prof. Kavokin Alexey – plenary*  
*School of Physics and Astronomy, University of Southampton, Southampton*  
**12.00-12.30**     *Coffee-break*  
**12.30-14.00**     **Section: Nonlinear optics and spectroscopy**  
**12.30-13.00**     Cryogenic fluorescence nanoscopy with detection of single-molecule zero-phonon lines  
*Prof. Naumov Andrey – invited*  
*Institute of Spectroscopy of RAS, Troitsk*  
**13.00-13.30**     The effect of molecular oscillations on energy transfer in macromolecular chain systems  
*Prof. Chizhov Alexey – invited*  
*Bogoliubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research*  
**13.00-13.45**     Temperature dependence of terahertz optical properties of LBO and perspectives of applications in down-converters  
*Dr. Nikolaev Nazar – oral*  
*High Current Electronics Institute SB RAS*

- 13.45-14.00 Low-temperature optical dephasing in ensemble of CdSe/CdS/ZnS quantum dots: study by means of incoherent photon echo  
*PhD Karimullin Kamil – oral*  
*Institute of Spectroscopy of RAS, Troitsk*
- 14.00-14.30 Short presentations of the young scientists
- 14.30-15.30 **Lunch**
- 15.30-19.00 **Excursion on Suzdal**
- 20.00 **Conference dinner**

**11.11.2017 (Saturday), Suzdal, Puschkarskaya sloboda**

- 10.00-11.30 Plenary talks:**
- 10.00-10.45 Hybrid nanostructures for solar energy applications. From Dye Solar Cells to Perovskites: a new era for mesoscopic photovoltaics  
*Prof. Eramo Giuseppe – plenary*  
*Mediterranean Institute of Fundamental Physics, Milano, Rome*
- 10.45-11.30 Mass-Defect Effects in Atomic Clocks  
*Prof. Taichenachev Alexey – plenary*  
*Institute of Laser Physics SB RAS, Novosibirsk*
- 11.30-12.00 Coffee-break**
- 12.00-13.30 Section: Quantum and atomic optics**
- 12.00-12.30 Spectroscopy of laser-cooled magnesium in an optical lattice  
*Prof. Rasel Ernst – invited*  
*Institute of Quantum Optics, Leibniz Hannover University, Hannover*
- 12.30-13.00 Analytical solutions for light emission intensities from cooperative ensembles in dielectrics  
*Dr. Maxim Gladush – invited*  
*Institute of Spectroscopy of RAS, Troitsk*
- 13.00-13.15 High extinction ratio integrated optical modulator for quantum telecommunication systems  
*Dr. Shamrai Aleksandr – oral*  
*Ioffe Institute, ITMO University, St. Petersburg*

- 13.15-13.30 Quantum antennas: designing states for field correlations  
**PhD Karuseichyk Ilya – oral**  
*Center of Quantum Optics and Quantum Information, B.I. Stepanov Institute of Physics, The National Academy of Sciences of Belarus, Minsk*
- 13.30-14.30 Lunch**
- 14.30-15.15 A polariton graph optimizer: what is needed to build a universal quantum simulator?  
**Prof. Berloff Natalia – plenary**  
*University of Cambridge, Cambridge*
- 15.15-15.45 Coffee-break**
- 15.45-16.30 Terahertz optics of the discrete and liquid environment  
**Prof. Shkurinov Alexander – plenary**  
*Lomonosov Moscow State University, Moscow*
- 16.30-19.15 Section: Nanophotonics and metamaterials**
- 16.30-17.00 Plasmonic nanolaser  
**Dr. Melentiev Pavel – invited**  
*Institute of Spectroscopy of RAS, Troitsk*
- 17.00-17.30 The development of hybrid plasmonic nanostructures for medical application  
**Dr. Povolotskiy Alexey – invited**  
*Institute of Chemistry, Saint-Petersburg State University, St. Petersburg*
- 17.30-17.45 Characterization of patterned texture on vertical-cavity surface-emitting lasers  
**PhD Huang Shen-Che – oral**  
*National Chiao Tung University, Hsinchu City*
- 17.45-18.00 Magnetic field control of the polariton spin dynamics  
**PhD Sedov Eugeniy – oral**  
*Vladimir State University, Vladimir*
- 18.00-18.15 Optical properties of  $\beta$ -BBO and potential for THz applications  
**Dr. Nikolaev Nazar – oral**  
*High Current Electronics Institute SB RAS, Novosibirsk*
- 18.15-18.30 The generation of nonclassical states of the localized plasmons in the spaser systems under control of external magnetic field.  
**PhD Prokhorov Alexey – oral**  
*Vladimir State University, Vladimir*

- 18.30-18.45 High order multipolar optical properties of non-symmetrical silicon nanostructures  
**PhD Baryshnikova Kseniia – oral**  
*Laboratory “Nanooptomechanics”, ITMO University, St. Petersburg*
- 18.45-19.00 Nonlinear bifurcation diagrams of the current states of microcavity exciton-polaritons in the lattice.  
**PhD Chestnov Igor – oral**  
*Vladimir State University, Vladimir*
- 19.00-19.15 Interrelation of the sub-wavelength gold film’s morphology on silicon and the efficiency of the second optical harmonic generation under ultrahigh vacuum conditions  
**Sinko Anton – oral**  
*Lomonosov Moscow State University, Moscow*
- 19.30-20.30 **Poster section**
- 19.30-20.30 **Project meeting**
- 20.30 **Dinner**

**12.11.2017 (Sunday), Suzdal, Puschkarskaya sloboda**

- 10.00-11.30 Plenary talks:**
- 10.00-10.45 Verification of the quantum size effects in electroconductivity due to laser-induced controllable topology of the thin film nanocluster structures  
**Prof. Arakelian Sergei – plenary**  
*Vladimir State University, Vladimir*
- 10.45-11.30 Approaching to the limit of SPASERS from SPP Nanolasers  
**Prof. Lu Tien-Chang – plenary**  
*National Chiao Tung University, Hsinchu City*
- 11.30-12.00 Coffee-break**
- 12.00-13.30 Section: The methods of synthesis and diagnostics of nanomaterials and nanostructures**
- 12.00-12.30 Novel Developments in SPM techniques  
**Dr. Polyakov Vyacheslav – invited**  
*NT-MDT Spectrum Instruments, Zelenograd*
- 12.30-13.00 Simulation of subpicosecond multi-pulse laser ablation of metals  
**Dr. Povarnitsyn Mikhail – invited**  
*Joint Institute for High Temperatures of RAS, Moscow*

- 13.00-13.15 Direct laser printing of chiral plasmonic nanojets by vortex beams  
**PhD Syubaev Sergey – oral**  
*Institute of Automation and Control Processes FEB RAS, Vladivostok*
- 13.15-13.30 Investigation properties and developing sensors based on graphene films, grown by thermodestruction of seminsulated SIC (0001) surface  
**Dr. Lebedev Alexander – oral**  
*Ioffe Institute and ITMO University, St. Petersburg*
- 13.30-15.00 Lunch**
- 15.00-16.45 Section: Section: The methods of synthesis and diagnostics of nanomaterials and nanostructures**
- 15.00-15.30 Structure of floating monolayers and Langmuir-Schaefer films of mix-substituted phthalocyanine holmium complex  
**Dr. Kazak Alexander – invited**  
*Nanomaterials Research Institute, Ivanovo State University, Ivanovo*
- 15.30-16.00 Applications of Atomic Force Microscopy in Liquid Environment  
**PhD Leesment Stanislav – invited**  
*NT-MDT Spectrum Instruments, Zelenograd*
- 16.00-16.15 Fabrication of porous nanostructures for Raman signal amplification  
**PhD Mitsai Evgeniy – oral**  
*Institute of Automation and Control Processes FEB RAS, Vladivostok*
- 16.15-16.30 Metal-carbyne complexes for SERS application  
**Osipov Anton – oral**  
*Vladimir State University, Vladimir*
- 16.30-16.45 New laser composite ceramic  
**Pankov Mikhail – oral**  
*FSE “GLP”Raduga*
- 17.00-19.00 **Project meeting**
- 20.00 Dinner**

**13.11.2017 (Monday), Suzdal, Puschkarskaya sloboda**

- 10.00-12.00 Short presentation of the young scientists
- 12.00-12.30 Closing ceremony
- 13.00-14.00 Lunch**