

LP-2015 Conference Program

Tuesday: October 6



08:30 Bus from Opera station in Yerevan

09:00 Minibus from YSU Guesthouse in Yerevan

09:30 – 10:00

12:00 – 13:00

Registration of the participants

Morning Session

Chair: Aram Papoyan

10:00

Conference opening: Welcome talks

Aram Papoyan, Director of IPR NAS

10:30

ICO and International Year of Light 2015

Angela Guzmán

CREOL, USA

11:00

Nonequilibrium particle production in strong laser fields

David Blaschke

University of Wrocław, Poland



11:30 – 13:00 Lunch & Coffee Break

Afternoon Session

Chairs: Claude Leroy

13:00

Non-exponential Auger decay

Vladimir Krainov

Moscow Institute of Physics and Technology, Russia

13:30

Resonant Kapitza-Dirac diffraction with small population transfer: Application for light-pulse atom interferometry

Gevorg Muradyan

Yerevan State University, Armenia

14:00

Thermoelectric single-photon detector on the base of CeB₆ and (La,Ce)B₆ nanowires

Armen Kuzanyan

Institute for Physical Research, NAS of Armenia

14:30

Extractable work from correlations

Karen Hovhannisyán

ICFO – The Institute of Photonic Sciences, Spain



15:30 Bus to the hotels

Wednesday: October 7

Morning Session Chair: Ashot Petrosyan

10:00	YAG:Ce crystals: Optimization and radiation hardness study for calorimetry applications <i>Marco Toliman Lucchini</i> CERN, Switzerland
10:30	Optical properties of plasmonic metal nanostructures on the dielectric and semiconductor surfaces <i>Tigran Vartanyan</i> ITMO University, Russia
11:00	Waveguide integrated plasmonic slot nano-antenna <i>Hovhannes Haroyan</i> Yerevan State University, Armenia
11:30	Pumping duration effects on the 1.5 μm downconversion luminescence kinetics of Er:YAG <i>Pavel Muzhikyan</i> Institute for Physical Research, NAS of Armenia



12:00 – 13:00 Lunch & Coffee Break

Afternoon Session Chairs: Tigran Vartanyan

13:00	Hanle optical vector magnetometer based on compensation of B-field <i>Aram Papoyan</i> Institute for Physical Research, NAS of Armenia
13:30	A note on the Natanzon potentials for the Schrödinger equation <i>Artur Ishkhanyan</i> Institute for Physical Research, NAS of Armenia
14:00	Periodically-driven exciton-photon systems <i>Anna Shahinyan</i> Institute for Physical Research, NAS of Armenia; Yerevan State University, Armenia
14:30	Memristive properties of transparent Li-doped ZnO films on metal and transparent oxide substrates <i>Arsen Igityan</i> Institute for Physical Research, NAS of Armenia; Russian-Armenia (Slavonic) University



15:30 Bus to the hotels

Thursday: October 8

Morning Session

Chair: Radik Kostanyan

10:00

Nonlinear optical properties of gated graphene systems

Anahit Djotyan

YerevanStateUniversity, Armenia

10:30

Medium transparency induced by one laser field in the presence of transverse magnetic field

Anahit Gogyan

Institute for Physical Research, NAS of Armenia

11:00

Faraday Effect in an optical nano-cell

Armen Sargsyan

Institute for Physical Research, NAS of Armenia

11:30 – 14:00

POSTER SESSION

Please hang the posters from the first day of the conference

For the list of posters please refer to pp. 5–7



13:00 – 14:00 Lunch & Coffee Break



14:00 → Sightseeing Tour

Friday: October 9

Morning Session

Chairs: Artur Ishkhanyan

10:00	Controlled spatial soliton formation and guiding in nonlinear photonic lattices: Application to all-optical devices <i>Rafael Drampyan</i> Institute for Physical Research, NAS of Armenia
11:00	Luminescence investigation of hafnia and zirconia thin films, nanopowders and ceramics <i>Eduard Aleksanyan</i> A. Alikhanyan National Science Laboratory, Armenia
11:30	Quantum Entanglement of Field States in Third-Harmonic Generation Process <i>Menua Gevorgyan</i> Institute for Physical Research, NAS of Armenia



12:00 – 13:00 Lunch & Coffee Break

Afternoon Session Chairs: Gayane Grigoryan

13:00	Electrical tuning of silicon metasurfaces <i>Andrei Komar</i> Australian National University, Australia
13:30	Nonlinear upconversion based on enhancement of third harmonic generation in gold nanomatryoshka; an nonlinear FDTD analysis <i>Pezhman Sasanpour</i> Medical Physics & Biomedical Engineering, Shahid Beheshti Medical University, Iran
14:00	Reorientation of nematic liquid crystal under the influence of laser light and electric fields <i>Varsenik Nersesyan</i> Institute for Physical Research, NAS of Armenia; Ghent university, Belgium
14:30	Down-conversion in structured nonlinear fiber <i>Anahit Tamazyan</i> Institute for Physical Research, NAS of Armenia



15:00 → Conference closing



16:00 → Bus to the hotels

Poster Presentations	
1	New approach studying manipulation of qubits by train of pulses <i>Gor Abovyan</i> Institute for Physical Research, NAS of Armenia
2	Peculiarities of Cs atomic transition behavior in strong transverse magnetic fields <i>Arevik Amiryan</i> Institute for Physical Research, NAS of Armenia
3	The silicon to aluminum conversion phenomenon in electrolytic cells <i>Rafik Balasanyan</i> Institute for Physical Research, NAS of Armenia
4	I-V characteristics of Pt-Ba_{0.25}Sr_{0.75} TiO₃-Pt thin films with oxygen vacancies <i>Vahe Buniatyan</i> Institute for Physical Research, NAS of Armenia
5	Optical and scintillation properties of GGG:Ce single crystals <i>Tatyana Butaeva</i> Institute for Physical Research, NAS of Armenia
6	Photoconductivity of iron doped LiNbO₃ crystals of different stoichiometry <i>Anush Danielyan</i> Institute for Physical Research, NAS of Armenia
7	The formation of metastable molecular states at the resonance scattering of two atoms in a laser radiation field <i>Emil Gazazyan</i> Institute for Physical Research, NAS of Armenia
8	Resonant and non-resonant approximation for three level system <i>Emil Gazazyan</i> Institute for Physical Research, NAS of Armenia
9	Efficient adiabatic tracking for molecular Bose-Einstein condensate production with Kerr nonlinearities <i>Mariam Gevorgyan</i> Institute for Physical Research, NAS of Armenia
10	Phase locking in parametrically driven nonlinear Kerr resonator <i>Tigran Gevorgyan</i> Institute for Physical Research, NAS of Armenia
11	Nonlinear optical properties of Zn₄B₆O₁₃ <i>Virab Gevorgyan</i> Yerevan State University, Armenia
12	On scattering phase shifts in 2D electron systems <i>Levon Hovakimian</i> Institute of Radiophysics and Electronics, NAS of Armenia
13	Toward to effective photon blockade: Pulse-shape dependent and temperature effects <i>Gor Hovsepyan</i> Institute for Physical Research, NAS of Armenia

14	Detection of IR laser pulses in the transparent ferromagnet <i>Hakob Julfayan</i> Institute of Radiophysics and Electronics, NAS of Armenia
15	Numerical study of spectron phase peculiarities <i>Narek Karapetyan</i> Yerevan State University, Armenia
16	Multilayer sensor of thermoelectric single photon detectors <i>Astghik Kuzanyan</i> Institute for Physical Research, NAS of Armenia
17	Spectral peculiarities of nonlinear-dispersive similariton <i>Karapet Manukyan</i> Yerevan State University, Armenia
18	Temperature dependence of current–voltage characteristic of pulsed laser deposited (p)InSb/(n)CdTe heterostructure <i>Artsruni Margaryan</i> Institute of Radiophysics and Electronics, NAS of Armenia
19	Helical $m=1$ mode formation dependence on spiral phaseplate properties <i>Artur Martirosyan</i> Institute for Physical Research, NAS of Armenia
20	Ho³⁺ ions doped lithium niobate: Electro-optic and dielectric properties <i>Anush Movsesyan</i> Institute for Physical Research, NAS of Armenia Armenian State Pedagogical University
21	The investigation of laser irradiation influence on the properties of CuO single crystals, coated by metal film <i>Svetlana Pashayan</i> Institute for Physical Research, NAS of Armenia
22	Non-linear spectroscopy of Rb vapor in a nanocell: The role played by excited atom-wall collisions in blue light generation <i>Pavel Petrov</i> ITMO University, Russia
23	Photoelectric properties of granular ZnO films <i>Armen Poghosyan</i> Institute for Physical Research, NAS of Armenia
24	EIT resonances inverted in a transverse magnetic field <i>Armen Sargsyan</i> Institute for Physical Research, NAS of Armenia
25	Splitting of EIT resonance in longitudinal and transverse magnetic fields realized in 1 cm long Potassium buffered cell <i>Armen Sargsyan</i> Institute for Physical Research, NAS of Armenia
26	The study of computational ghost imaging in presence of turbulence <i>Parisa Soleimani</i> University of Tabriz, Iran

27	Solitonic spectral self-compression of randomly modulated pulses <i>Minas Sukiasyan</i> Yerevan State University, Armenia
28	Laser-induced modification of copper oxide nanoparticles synthesized by laser ablation technique <i>Nikolai Tarasenko</i> B.I. Stepanov Institute of Physics, NAS of Belarus
29	Behavior of D₁ line atomic transitions of ³⁹K isotope in the presence of strong external magnetic fields <i>Ara Tonoyan</i> Institute for Physical Research, NAS of Armenia
30	Transport properties of CaLaBaCu₃O_x and SrLaBaCu₃O_x ceramics <i>Violetta Vardanyan</i> Institute for Physical Research, NAS of Armenia
31	Influence of Ce ion on ⁴I_{13/2}→⁴I_{15/2} transition luminescence kinetics under varying pumping durations in Er,Ce:YAG crystals <i>Davit Zargaryan</i> Institute for Physical Research, NAS of Armenia
32	Electron-Beam Deposition of Lanthanum-Magnesium-Hexaaluminate <i>Silva Petrosyan</i> Institute for Physical Research, NAS of Armenia