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LP-2011 PROGRAMME

Tuesday: October 11

09:30 – 10:30
12:30 – 13:30
Registration of the participants

Morning Session		Chair: E. Vardanyan
10:30		**Conference Opening: Welcome Talks** *Aram Papoyan, Director of IPR NAS,* ***Zhores Alferov**, Nobel Prize Winner,* *Invited officials*
11:30		**Presentation of the International Commission for Optics** *Angela Guzmán* International Commission for Optics
12:00	O1	**Rydberg Excitations in BECs and Cold Clouds** *M.G. Bason[1], M. Viteau[1], N. Malossi[1,2], D. Ciampini[1,2], O. Morsch[1], E. Arimondo[1,2]* [1]INO-CNR, Dipartimento di Fisica "E. Fermi", Università di Pisa, Pisa, Italy [2]CNISM, Dipartimento di Fisica "E. Fermi", Università di Pisa, Pisa, Italy
		12:30 – 14:00 Lunch & Coffee Break
Afternoon Session		Chairs: D. Sarkisyan, C. Leroy
14:00	O2	**Selective Addressing of Amplification of Narrow Resonance Formed in Transmission Spectrum of Rubidium Nano-cell in External Magnetic Field** *D. Sarkisyan[1], Y. Pashayan-Leroy[2], C. Leroy[2], A. Papoyan[1], G. Hakhumyan[1,2], A. Sargsyan[1]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, France
14:30	O3	**Nonlinear Magneto-optical Resonances for Systems with J ~100 Observed in K_2 Molecules** *Marcis Auzinsh* University of Latvia, Latvia
15:00	O4	**Power Dependent Van Der Waals Interaction in Cold Atom Reflection** *A.M. Guzmán[1], G. Estrada[2]* [1]College of Optics and Photonics, University of Central Florida, USA [2]Physics Department, Florida Atlantic University, USA
15:30–16:00	O5	**Метод электронного парамагнитного резонанса при исследовании материалов для квантовой электроники (YAG, YLuAG, YAP, YLuAP, $PbGa_2S_4$)** *Г.Р. Асатрян, П.Г. Баранов* Учреждение Российской академии наук Физико-технический институт им. А.Ф. Иоффе РАН, Россия
		16:30 Bus to the hotels

Wednesday: October 12

Morning Session		Chairs: Yu. Malakyan, A. Ishkhanyan
10:00	O6	**Generation of Mesoscopic Entangled States in a Cavity Coupled to an Atomic Ensemble** *Gor Nikoghosyan* University of Ulm, Germany Institute for Physical Research, NAS of Armenia, Armenia
10:30	O7	**Nonlinear Quantum Reflection of a Bose-condensate by a Step Potential** *H.A. Ishkhanyan[1,2], A.M. Manukyan[1], A.M. Ishkhanyan[1]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Moscow Institute of Physics and Technology, Russia
11:00	O8	**Quantum Repeaters based on Deterministic Storage of a Single Photon in distant Atomic Ensembles** *Yuri Malakyan* Institute for Physical Research, NAS of Armenia, Armenia
11:30	O9	**Quantum Logical Gate SWAP in Three- and Four- Level Cold Atomic Ensemble** *A. Gogyan, Yu. Malakyan* Institute for Physical Research, NAS of Armenia, Armenia
		12:00 – 13:30 Lunch & Coffee Break
Afternoon Session		Chairs: M. Auzinsh, G. Grigoryan
13:30	O10	**Electromagnetically Induced Transparency Involving D_2 Line of Cs Atoms Confined in Micrometer Thin Vapor Layer** *A. Sargsyan[1],Y. Pashayan-Leroy[2], C. Leroy[2], D. Sarkisyan[1], D. Slavov[3], S. Cartaleva[3]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, France [3]Institute of Electronics, Bulgarian Academy of Sciences, Bulgaria
14:00	O11	**Study of Forbidden Atomic Transitions on *D* Line Using Rb Nano-cell Placed in External Magnetic Field** *G. Hakhumyan[1,2], R. Mirzoyan[1], C. Leroy[2], Y. Pashayan-Leroy[2], D. Sarkisyan[1]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, France
14:30	O12	**Distinguishing Characteristics of Optical Cooling Effect on Doped Ferroelectrics** *Vahan Babajanyan* Institute for Physical Research, NAS of Armenia, Armenia
15:00-15:30	O13	**Time-resolved Luminescence Spectroscopy of YAG:Er^{3+}-Ce^{3+} Crystal** *V.G. Babajanyan, R.B. Kostanyan, P.H. Muzhikyan, A.G. Petrosyan, D.G. Zargaryan* Institute for Physical Research, NAS of Armenia, Armenia
		16:00 Bus to the hotels

Thursday: October 13

10:00 – 13:30
POSTER SESSION
For the list of posters please refer to pp. 5–9.

13:30 – 14:30 Lunch & Coffee Break

14:30 → Sightseeing Tour

Friday: October 14

Morning Session		Chairs: R. Kostanyan, G. Nikoghosyan
10:00	O14	**Photon–photon Interaction in Structured QED Vacuum** *G.Yu. Kryuchkyan[1,2,3], K.Z. Hatsagortsyan[1]* [1]Max Planck Institute for Nuclear Physics, Heidelberg, Germany [2]Yerevan State University, Yerevan, Armenia [3]Institute for Physical Research, NAS of Armenia, Armenia
10:30	O15	**Coulomb Focusing at Above-threshold Ionization in Mid-infrared Strong Laser Fields** *K.Z. Hatsagortsyan, C. Liu* Max Planck Institute for Nuclear Physics, Heidelberg, Germany
11:00	O16	**Production of Fock States in Pulsed Anharmonic Oscillators** *T.V. Gevorgyan[1], A.R. Shahinyan[2], G.Yu. Kryuchkyan[1,2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Yerevan State University, Yerevan, Armenia
11:30	O17	**Non-Markovian Quantum Dynamics to Control Decoherence: an Ancillary Qubit Can Help Increase the Fidelity of a Two-qubit Gate** *Angela M. Guzmán* College of Optics and Photonics, University of Central Florida, USA
		12:00 – 13:30 Lunch & Coffee Break
Afternoon Session		Chairs: A. Melikyan, R. Drampyan
13:30	O18	**Magneto-absorption in Ellipsoidal Quantum Dots** *K.G. Dvoyan[1], V.V. Evoyan[1], E.M. Kazaryan[1], R.G. Nazmitdinov[2,3], H.A. Sarkisyan[1,4]* [1]Russian-Armenian (Slavonic) University, Armenia [2]Department de Fisica, Universitat de les Illes Balears, Spain [3]Joint Institute for Nuclear Research, Russia [4]Yerevan State University, Armenia
14:00	O19	**Extracting Work from Microcanonical Bath: Entropy-Information Relation Revisited** *Armen E. Allahverdyan[1,2], Karen V. Hovhannisyan[1]* [1]A.I. Alikhanyan National Laboratory (Yerevan Physics Institute), Armenia [2]Laboratoire de Physique Statistique et Systemes Complexes, ISMANS, France
14:30	O20	**Surface Plasmon Radiation Damping Rate in the Metallic Nanosphere Interacting with Interface** *K. Madoyan[1], A. Melikyan[1], H. Minassian[2]* [1]Russian-Armenian (Slavonic) University, Armenia [2]A.I. Alikhanyan National Laboratory (Yerevan Physics Institute), Armenia
15:00-15:30		**Conference Closing**
		16:00 Bus to the hotels

Poster Presentations

Materials for quantum electronics

Chairs: E. Vardanyan, R. Hovsepyan, Y. Kafadaryan, R. Drampyan, E. Kokanyan

P1-1	**Effect of a Subwavelength Layer on All-optical Diode Action in 1D Photonic Crystal** *K. Jamshidi-Ghaleh[1], Z. Safari[2], R. Abdi-Ghaleh[1], Z. Bahmei[2], H. Lotfi[2]* [1]Azarbaijan University of Tarbiat Moallem, Tabriz, Iran [2]University of Bonab, Iran
P1-2	**Experimental Investigation of Spectral Peculiarities of Multilayer System, Consisting of Dye Doped Polymer Film Sandwiched between Two Cholersteric Liquid Crystal Layers** *T.K. Dadalyan[1], R.B. Alaverdyan* Yerevan State University, Armenia
P1-3	**Experimental Study of Optical Activity of Planar Chiral Structure Generated on the Surface of Azo Polymer Film** *Sohrab Ahmadi Kandjane, Mahsa Khadem Sadigh* University of Tabriz, Iran
P1-4	**Hexafluorosilicates of Amino Acids** *V.V. Ghazaryan[1], M. Fleck[2], A.M. Petrosyan[1]* [1]Institute of Applied Problems of Physics, NAS of Armenia, Armenia [2]Institute of Mineralogy and Crystallography, University of Vienna, Austria
P1-5	**Аномальное фазообразование в ходе получения плёнок Er_2O_3 методом электронно-лучевого напыления** *Н.Р. Агамалян[1], Р.К. Овсепян[1], Е.А. Кафадарян[1], Р.Б. Костанян[1], С.И. Петросян[1], Г.О. Ширинян[1], Г.Р. Бадалян[1], А.Х. Абдуев[2], А.Ш. Асваров[2]* [1]Институт физических исследований НАН Армении, Армения [2]Институт физики, Дагестанский научный центр РАН, Махачкала, Россия
P1-6	**Charge Waves in Double Doped Photochromic Lithium Niobate Crystals** *R.K. Hovsepyan, A.R. Poghosyan, E.S. Vardanyan* Institute for Physical Research, NAS of Armenia, Armenia
P1-7	**Электронные фазовые переходы металл–изолятор в широкозонных полупроводниках ZnO** *Н.Р. Агамалян, Э.С. Варданян, Е.А. Кафадарян, Р.К. Овсепян, С.И. Петросян, А.Р. Погосян* Институт физических исследований НАН Армении, Армения
P1-8	**Structural and Electrical Properties of La-based Oxide Structures** *E.A. Kafadaryan[1], S.I. Petrosyan[1], G.R. Badalyan[1], V. Lazaryan[1], G.H. Shirinyan[1], H.S. Semerjian[2], N.R. Aghamalyan[1], A.M. Kuzanyan[1]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Yerevan State University, Armenia
P1-9	**The Study of Peculiarities of CeB_6 Crystals Chemical Composition for the Purpose of Creating a Single-photon Detector of UV and X-ray ranges** *A. Kuzanyan[1], V. Kuzanyan[1], G. Badalyan[1], V. Nikoghosyan[1], M. Konovalov[2], V. Gurin[2], U. Burkhardt[3], Y. Grin[3]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]A.F. Ioffe Physical-Technical Institute Russian Academy of Sciences, St. Petersburg, Russia [3]Max Plank Institute for Chemical Physics of Solids, Dresden, Germany
P1-10	**Modelling the Kinetic Processes Occurring in the Sensor of a Thermoelectric Detector upon Absorbing a Single Photon** *V. Nikoghosyan[1], V. Petrosyan[1], A. Kuzanyan[1], A.Gulian[2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Physics Art Frontiers, Ashton, Maryland, USA
P1-11	**Infrared Down-conversion Luminescence in $LiNbO_3:Er^{3+}$ Excited by Short Pulse Radiation at 980 nm** *E.P. Kokanyan[1,2], G.G. Demirkhanyan[1,2], E. Steveler[3], H. Rinnert[3], M. Aillerie[4]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Armenian State Pedagogical University after Kh. Abovyan, Armenia [3]Institut Jean Lamour, Nancy-University, Vandœuvre-lès-Nancy, France [4]LMOPS, University Paul Verlaine of Metz and Supelec, Metz, France

P1-12	**Evidence of Multiparticle Optical Centers in $LiNbO_3:Er^{3+}–Yb^{3+}$ Crystal** *V.G. Babajanyan, R.B. Kostanyan, P.H. Muzhikyan, D.G. Zargaryan* Institute for Physical Research, NAS of Armenia, Armenia
Generation and conversion of laser radiation Chairs: V. Chaltykyan, G. Grigoryan, V. Babajanyan,	
P2-1	**Время-частотное распределение излучения разностной частоты сгенерированного в поле лазерного импульса длительностью в несколько оптических колебаний распространяющегося в кристалле GaAs с периодической доменной структурой** *Д.Л. Оганесян[1], В. О. Чалтикян[2], Г.Д. Оганесян[1]* [1]Ереванский государственный университет, Армения [2]Институт физических исследований НАН Армении, Армения
P2-2	**Generation of Terahertz Radiation in Nonlinear Crystals Placed Within a Hollow Waveguides** *Anahit Nikoghosyan* Yerevan State University, Yerevan, Armenia
P2-3	**Similariton-based Spectral Interferometry for Femtosecond Pulse Characterization** *A. Zeytunyan, G. Yesayan, L. Mouradian* Yerevan State University, Armenia
P2-4	**Исследование нелинейного взаимодействия электромагнитного излучения с объёмным зарядом в вакуумных электронных приборах** *А.О. Макарян, О.С. Ароян, В.А. Саакян, В.Р. Татевосян* Ереванский государственный университет, Армения
P2-5	**The Effects Temperature on Optical Gain in GaN Based Quantum Dot Laser** *P. Navaei, A. Asgari, S. Shojaie, R. Kheradmand* University of Tabriz, Iran
P2-6	**Near and Far Field Optical Patterns Formation by Rotational Symmetry Masks: Application to Optical Spatial Soliton Generation** *A. Badalyan[1], P. Mantashyan[1], V. Mekhitaryan[1], V. Nersesyan[2], R. Drampyan[1,2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Russian-Armenian (Slavonic) University, Armenia
P2-7	**Оптические уравнения Блоха и пространственная динамика поляризации света** *Л.С. Асланян, А.Л. Асланян, С.К. Назарян* Ереванский государственный университет, Армения
Resonance interaction of laser radiation with matter; Laser spectroscopy Chairs: D. Sarkisyan, A. Gazazyan, R. Drampyan, N. Agamalyan	
P3-1	**Experimental Investigation of the Writing Beam Coherence on Self-Organized Patterns Formed on Azo Polymer Film** *Ramin Abazari, Sohrab Ahmadi Kandjani* University of Tabriz, Iran
P3-2	**Birefringence Enhancement via Quantum Interference in the Presence of Magnetic Field** *A. Saleh, A. Mortezapour, M. Mahmoudi* University of Zanjan, Iran
P3-3	**Ultrashort Pulse-generation in the Induced Optical Anisotropic Medium** *M.H. Hovhannisyan, A.Zh. Muradyan* Yerevan State University, Yerevan, Armenia
P3-4	**Laser-induced Thermomechanical Effects in Nematic Liquid Crystal** *R.S. Hakobyan, R.B. Alaverdyan, A.K. Aleksanyan, G.S. Gevorgyan* Yerevan State University, Armenia
P3-5	**Convective Motions in Nematic Liquid Crystal Homeotrop and Planar Cells Induced by Gaussian Laser Beam** *R.S. Hakobyan, A.K. Aleksanyan, A.K. Minasyan* Yerevan State University, Armenia
P3-6	**Second Harmonic Generation Modeled by the Demkov-Kunike Resonance-crossing Configuration** *H.H. Azizbekyan, A.M. Manukyan, A.M. Ishkhanyan* Institute for Physical Research, NAS of Armenia, Armenia

P3-7	**Study of the Rb Dark-line atomic resonance splitting in a Strong Magnetic Field** *R. Mirzoyan, A. Sargsyan, D. Sarkisyan* Institute for Physical Research, NAS of Armenia, Armenia
P3-8	**Intensity-dependent Features in Hydrogen-Buffered Cesium Spectra** *S.V. Shmavonyan, A.V. Papoyan* Institute for Physical Research, NAS of Armenia, Armenia
P3-9	**Analysis of High Excited "Hot" Bands of the SO_2 Molecule** *O.V. Gromova[1,2], O.N. Ulenikov[2], E.S. Bekhtereva[2], C. Leroy[3]* [1]Tomsk Polytechnic University, Department of Theoretical and Experimental Physics, Tomsk, Russia [2]Tomsk State University, Physics Department, Tomsk, Russia [3]Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, France
P3-10	**Influence of Unequal Oscillator Strengths on Stimulated Raman Adiabatic Passage through Bright State** *L. Chakhmakhchyan[1,2], G. Grigoryan[1], C. Leroy[2], Y. Pashayan-Leroy[2], S. Guerin[2], H.R. Jauslin[2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, France
P3-11	**Interference Phenomena at the Elastic Collision of Atoms in Laser Field With Formation of Feshbach Resonance and Allowance for Inelastic Decay Channel** *E. Gazazyan, A. Gazazyan, V. Chaltykyan* Institute for Physical Research, NAS of Armenia, Armenia
P3-12	**Constructing Specified Coherent Superposition States of Atoms in Macroscopic Volume** *G. Grigoryan[1], V. Chaltykyan[1], E. Gazazyan[1], O. Tikhova[2], A. Hovhannisyan[2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]Russian-Armenian (Slavonic) University, Armenia
Laser instrumentation and applications Chairs: R. Manucharyan, G. Buniatyan, A. Kuzanyan	
P4-1	**Physical Properties of the Pulsed-laser Deposited Sb-pSi and aC-Sb-pSi Surface-barrier Structures** *Zh. Panosyan[1], Ye. Yengibaryan[1], K. Avjyan[2], L. Matevosyan[2], A. Khachatryan[2]* [1]"Heliotechnics" Laboratory of State Engineering University of Armenia, Armenia [2]Institute of Radiophysics and Electronics, NAS of Armenia, Armenia
P4-2	**Hypericin-specified Destruction of Collagen Fibers Revealed by Multiphoton Microscopy** *Ararat Zh. Hovhannisyan[1], Vladimir A. Hovhannisyan[2], Chen-Yuan Dong[2]* [1]European Regional Educational Academy, Yerevan, Armenia [2]National Taiwan University, Taipei, Taiwan
P4-3	**Investigation of Metal-dielectric Composite Materials for Excitation of Surface Plasmon Polariton in Terahertz Range** *V.R. Tadevosyan, H.S. Haroyan, A.H. Makaryan, Yu.H. Avetisyan* Yerevan State University, Armenia
P4-4	**Investigation of CuO Ceramic Samples Properties before and after Influence of Laser Radiation** *A.S. Kuzanyan[1], S.T. Pashayan[1], V.T. Tatoyan[1], V.R. Nikoghosyan[1], V.S. Kuzanyan[1], V.H.Vardanyan[1], V.M. Nesterov[2], S.Kh. Pilosyan[2], A.Z. Grasyuk[2]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]P.N. Lebedev Physical Institute of the Russian Academy of Sciences, Moscow, Russia
P4-5	**Methods for Pulsed Laser Deposition of Large-area Films Using More than One Target** *A.A. Kuzanyan, V.A. Petrosyan, A.S.Kuzanyan* Institute for Physical Research, NAS of Armenia, Armenia
P4-6	**Femtosecond Pulse Compression: Managing and Optimization of the Pulse Asymmetry** *A. Grigoryan, G. Yesayan, A. Zeytunyan, L. Mouradian* Yerevan State University, Armenia
P4-7	**Relativistic Formulation of Moiré Fringes for Moving Periodic Structures** *F. Bayat[1] , S. Rasouli[2], M. Mahmoudi [1], S. Ghanbari[1]* [1]University of Zanjan, Iran [2]Institute for Advanced Studies in Basic Sciences, Zanjan, Iran

Quantum optics and matter waves Chairs: G. Kryuchkyan, Yu. Malakyan, A. Ishkhanyan, G. Nikoghosyan	
P5-1	**Controlling the Negative Refractive Index in a Four-level Atomic System via Applied Fields** *N. Zolghadri, M. Sahrai* University of Tabriz, Iran
P5-2	**Controlling the Probe -absorption and -dispersion via Quantum Interference from Incoherent Pumping Field in the Four-Level Atomic System** *R. Nasehi[1,2], H. Hamedi[1], M. Memarzadeh[1], M. Sahrai[1], J. Poursamad[2]* [1]University of Tabriz, Iran [2]University of Bonab, Iran
P5-3	**The Effect of Electric and Magnetic Fields on the Bound Polaron States in the Cylindrical Quantum Wire with Finite Confining Potential** *Abbas Shahbandari* Yerevan State University, Armenia
P5-4	**Giant Kerr Nonlinearity via Interacting Dark Resonance States** *H. Hamedi[1], M. Sahrai[1], M. Memarzadeh[1], R. Nasehi[2], J. Poursamad[2]* [1]University of Tabriz, Iran [2]University of Bonab, Iran
P5-5	**Optical properties of four level medium via spontaneously generated coherence** *Seyyed Hossein Asadpour[1], Hamed Mahrami [2], Hamid Reza Hamedi[1], Mostafa Sahrai[1], Rasoul Sadighi-Bonabi[3]* [1]University of Tabriz, Iran [2]University of Bonab, Iran [3]Sharif University of Technology, Iran
P5-6	**Absorptive and Dispersive Properties of Four-Level Tripod Atomic Medium via Incoherent Pumping Field** *Seyyed Hossein Asadpour[1], Hamed Mahrami[2], Hamid Reza Hamedi[1], Mostafa Sahrai[1], Rasoul Sadighi-Bonabi[3]* [1]University of Tabriz, Iran [2]University of Bonab, Iran [3]Sharif University of Technology, Iran
P5-7	**The Disordering Effect on the One-Dimensional Aperiodic Optical Superlattice in Multi-Frequency SHG** *Majid Nemati* Yerevan State University, Armenia
P5-8	**Multi-frequency SHG Process in the Presence of Disordered Two-dimensional Aperiodic Optical Superlattices** *N. Sang Nour Pour[1 2], M. Nemati[1,2,3], M. Goalipour[1], R. Kheradmand[2], M. Rezaei[1], G. Kryuchkyan[3]* [1]Department of Theoretical Physics, Faculty of Physics, University of Tabriz, Tabriz, Iran [2]Research Institute for Applied Physics and Astronomy, University of Tabriz, Tabriz, Iran [3]Yerevan State University, Yerevan, Armenia
P5-9	**Optical-theorem-based Study of Perturbative Scattering in *N* Dimensions** *Levon Hovakimian* Institute of Radiophysics and Electronics, NAS of Armenia, Armenia
P5-10	**Quantum Description of Unstable Behaviour of Intracavity Third Harmonic Generation Process** *M.S. Gevorgyan[1], S.T. Gevorgyan[2]* [1]Moscow Institute of Physics and Technology, Russia [2]Institute for Physical Research, NAS of Armenia, Armenia
Optical properties of nanostructures and luminescent materials Chairs: A. Petrosyan, E. Sharoyan, H. Sarkisyan, K. Aharonyan, K. Dvoyan	
P6-1	**Investigation of Exciton-LO-phonon Interaction in Semiconductor QDs** *S. Saeed Nahaie[1], S. Shojaei[2], A. Asghari[2], K. Agdami[3]* [1]Payame Noor University, Urmia, Iran [2]University of Tabriz, Iran [3]Payame Noor University, Miandoab, Iran

P6-2	**Determining the Nonlinear Coefficient of Gold and Silver Nanocolloids Using SPM and Z-scan** *Hamid Nadjari[1], Zahra Abasi Azad[2]* [1]University of Zanjan, Iran [2]Islamic Azad University Central Tehran Branch, Iran
P6-3	**Low temperature Study of an Organic/inorganic Complex Based on $PbBr_2$** *Hossein Ghanbari Ghalehjoughi, Reza Kheradmand, Sohrab Ahmadi Kandjani* University of Tabriz, Iran
P6-4	**Прямое межзонное поглощение света в сферической квантовой точке с ограничивающим модифицированным потенциалом Пешля-Теллера** *О. Тевосян, Д.Б. Айрапетян, К.Г. Двоян, Э.М. Казарян* Российско-Армянский (Славянский) университет
P6-5	**Absorption Threshold Frequencies and Stark Shift in Narrow Gap InSb Spherical Quantum Layer** *E.M. Kazaryan[1], A.A. Kirakosyan[2], V.N. Mughnetsyan[2], H.A. Sarkisyan[1,2]* [1]Russian-Armenian (Slavonic) University, Armenia [2]Yerevan State University, Armenia
P6-6	**Optical Sensitivity of Noble Metal Nanorods** *T. Makaryan[1], A. Melikyan[2], H. Minassian[3]* [1]Yerevan State University, Yerevan, Armenia [2]Russian-Armenian (Slavonic) University, Armenia [3]A.I. Alikhanyan National Laboratory (Yerevan Physics Institute), Armenia
P6-7	**Electric Field Tuning of the Band Gap in Four Layers of Graphene with Different Stacking Order** *A. Avetisyan[1], B. Partoens[2], F.M. Peeters[2]* [1]Yerevan State University, Armenia [2]University of Antwerpen, Belgium
P6-8	**Optical Properties of a Shallow Donor near Semiconductor-metal Interface** *Anahit Djotyan* Yerevan State University, Armenia
P6-9	**The Influence of the Spin-orbit Interaction on the Moving Polaron in a Semiconductor Nanostructure in Electric and Magnetic Fields** *A.L. Vartanian, K.A. Vardanyan, A.A. Kirakosyan* Yerevan State University, Armenia
P6-10	**The Effect of Screened Coulomb Interaction on the Optical Properties of EuS/PbS/EuS Finite Confining Quantum Well** *K.H. Aharonyan[1], E.M. Kazaryan[2]* [1]State Engineering University of Armenia, Armenia [2]Russian-Armenian (Slavonic) University, Armenia
P6-11	**The Optical Properties of Pulsed Laser Deposited Amorphous Ge Films** *Arsen Mkrtchyan* Institute of Radiophysics and Electronics, NAS of Armenia, Armenia
P6-12	**Raman Spectra and Structural Transformations in Nickel-Carbon Nanocomposites** *A.A. Mirzakhanyan, A.S. Manukyan, T.K. Khachatryan, G.R. Badalyan, E.G. Sharoyan* Institute for Physical Research, NAS of Armenia, Armenia
P6-13	**Influence of Color Centers on Spectral Properties of Ce^{3+} Ions in YAG:Ce Crystals** *T. Butaeva[1], I. Gambaryan[1], K. Ovanesyan[1], A. Petrosyan[1], M. Mkrtchyan[2], C. Dujardin[3], C. Pedrini[3]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]A.I. Alikhanyan National Laboratory (Yerevan Physics Institute), Armenia [3]Université de Lyon, Université Lyon 1, CNRS, Laboratoire de Physico-Chimie des Matériaux Luminescents, Université de Lyon, Villeurbanne Cedex, France
P6-14	**Comparison of Optical Properties of LuAG:Pr and LuAG:Pr(Sc,Hf) Scintillation Crystals Grown by the Bridgman Method** *M. Derdzyan[1], K. Ovanesyan[1], A. Petrosyan[1], R. Sargsyan[1], G. Shirinyan[1], E. Auffray[2], E. Dimovasili[2], P. Lecoq[2], K. Pauwels[2], C. Dujardin[3], C. Pedrini[3]* [1]Institute for Physical Research, NAS of Armenia, Armenia [2]European Organization for Nuclear Research, CERN, Geneva, Switzerland [3]Université de Lyon, Université Lyon 1, CNRS, Laboratoire de Physico-Chimie des Matériaux Luminescents, Université de Lyon, Villeurbanne Cedex, France