National Science Center Kharkov Institute of Physics and Technology

3<sup>rd</sup> International Conference on

QUANTUM ELECTRODYNAMICS AND STATISTICAL PHYSICS

# **QEDSP2011**

# **CONFERENCE PROGRAM**

August 29 – September 02, 2011

Kharkov, Ukraine

# Updated 28 Aug 2011

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# Monday, August 29, 2011

8-00 - 10-30 Registration

10-30 - 11-00 Opening (Large Hall, KNU)

# Plenary Session (Large Hall KNU<sup>1</sup>)

#### Chairman A.Bakai

- 11-00 11-30 MAGNETOELASTIC WAVES IN THE FERROMAGNETS PLE2 NEAR MARTENSITE PHASE TRANSITION V.G. Bar'yakhtar, A.G. Danilevich, V.A. L'vov
- 11-30 12-00 COHERENT PROCESSES IN SCATTERING AND PLB4 RADIATION AT HIGH-ENERGIES IN CRYSTALS (To the 100th anniversary of the birth of A.I. AKHIEZER) N.F. Shul'ga
- 12-00 12-30 KINETIC EQUATIONS IN THE POLARON THEORY FOR PLD1 THE CASE OF SPACE INHOMOGENEITY Nikolai Bogolubov (Jr.) and Anna Ghazaryan
- 12-30 13-00 FOKKER-PLANCK EQUATIONS WITH MEMORY: THE PLE8 CROSS OVER FROM BALLISTIC TO DIFFUSIVE PROCESSES A. Zagorodny
- 13-30 14-40 Lunch

# Section A (New Physical Sinelnikov Lecture Hall<sup>2</sup>, KNU)

#### Chairman Yu.Sitenko

14-40 - 15-00 GENERALIZED HOOKE LAW FOR RELATIVISTIC OA18 MEMBRANES AND P-BRANES A.A. Zheltukhin

15-00 - 15-20 REPRESENTATION POSSESSING COMPONENTS WITH OA15 DIFFERENT MASSES D.V. Soroka and V.A. Soroka

<sup>&</sup>lt;sup>1</sup> See Plan of the KNU building, Fig. 1, page 30

<sup>&</sup>lt;sup>2</sup> See Plan of the KNU building, Fig. 3, page 31

- 15-20 15-40 RELATIVISTIC INTERACTIONS IN MESON-NUCLEON OA14 SYSTEMS: APPLICATIONS IN THE THEORY OF NUCLEAR REACTIONS A.V. Shebeko
- 15-40 16-00 ON THE TYPE OF THE TEMPERATURE PHASE OA5 TRANSITION IN O(N) MODELS V. Demchik, M. Bordag, A. Gulov, and V. Skalozub
- 16-00 16-20 Coffee Break

# Chairman A.Shebeko

- 16-20 16-40
   A NONLOCAL EXTENSION OF THE WENTZEL FIELD

   OA8
   MODEL IN THE CLOTHED-PARTICLE REPRESENTATION

   A.V. Shebeko and <u>P.A. Frolov</u>
- 16-40 17-00 QUARK TO *W/Z* BOSON CONVERSION IN *pp* COLLISIONS OA3 M.V. Bondarenco
- 17-00 17-20 INTEGRABLE WZNW MODELS AND STRING MODELS OF PF5 WZNW MODEL TYPE WITH CONSTANT SU(2) TORSION V.D. Gershun
- 17-20 17-40 ADS<sub>4</sub>×CP<sup>3</sup> SUPERSTRING: 3D CONFORMAL SYMMETRY PA13 PERSPECTIVE D V Uvarov

# Section B (Large Physical Lecture Hall<sup>3</sup>, KNU)

# Chairman E.Kuraev

- 14-40 15-00
   EVOLUTION OF THE HADRONIC SYSTEM CREATED IN

   OB1
   RELATIVISTIC HEAVY-ION COLLISIONS

   D. Anchishkin, V. Vovchenko, A. Muskeyev, and S. Yezhov
- 15-00 15-20 RESONANT EFFECTS OF QUANTUM OB12 ELECTRODYNAMICS IN THE PULSED LIGHT FIELD S.P. Roshchupkin

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<sup>&</sup>lt;sup>3</sup> See Plan of the KNU building, Fig. 2, page 30

15-20 - 15-40 THRESHOLD ELECTRON-POSITRON PAIR PRODUCTION OB11 BY A POLARIZED ELECTRON IN A STRONG MAGNETIC FIELD

O.P. Novak and R.I. Kholodov

- 15-40 16-00 RADIATIVE CORRECTIONS TO POLARIZED
- OB9 OBSERVABLES IN ELASTIC ELECTRON-DEUTERON SCATTERING IN LEPTONIC VARIABLES G.I. Gakh, M.I.Konchatnij and <u>N.P. Merenkov</u>
- 16-00 16-20 Coffee Break

#### Chairman R.Kholodov

- 16-20 16-40
   POLARIZATION PHENOMENA IN THE TWO-PHOTON

   OB8
   ELECTRON-POSITRON ANNIHILATION

   V.N. Maslov, and Yu.P. Stepanovsky
- 16-40 17-00 EFFECT OF SCALAR ELECTROMAGNETIC FIELD OB3 COUPLING AND STRONG-NONLINEAR ELECTROMAGNETIC FIELD ON LIGHT PROPAGATION IN LABORATORY AND ASTROPHYSICAL ENVIRONMENTS Avijit K. Ganguly
- 17-00 17-20 AMPLIFICATION OF ELECTROMAGNETIC FIELD IN THE OB15 ULTRARELATIVISTIC ELECTRON SCATTERING BY ION IN A LIGHT WAVE V.A. Tsybul'nik, S.P. Roshchupkin
- 17-20 17-40 THE INFLUENCE OF A STRONG PULSED LASER FIELD OB7 ON THE PROCESSES OF NONRELATIVISTIC ELECTRON SCATTERING BY A NUCLEUS <u>A.A. Lebed'</u>, S.P. Roshchupkin

# Section E (VI-52 Tarapov Lecture Hall<sup>4</sup>, 6th fl., KNU)

#### Chairman A.Chechkin

14-40 - 15-00 INTERACTION OF HE II QUASIPARTICLES WITH OE2 INTERFACES AND SURFACE MODES I.V. Tanatarov, I.N. Adamenko, K.E. Nemchenko, and A.F.G. Wyatt

<sup>&</sup>lt;sup>4</sup> See Plan of the KNU building, Fig. 4, page 31

- 15-00 15-20 ROLE OF SINGLE-PARTICLE AND PAIR CONDESATES IN OE17 SUPERFLUID BOSE SYSTEMS <u>A.S. Peletminskii</u>, S.V. Peletminskii, and Yu.M. Poluektov
- 15-20 15-40 SYMMETRY, PHASE STATES AND DYNAMICS OF OE9 MAGNETS WITH SPIN *s*=1 M.Y. Kovalevsky, O.A. Kotelnikova
- 15-40 16-00 PARAMAGNETIC TUNNELING SYSTEMS AND THEIR OE4 CONTRIBUTION TO THE POLARIZATION ECHO IN GLASSES <u>A. Borisenko</u> and G. Jug
- 16-00 16-20 Coffee Break

#### Chairman I.Adamenko

- 16-20 16-40 QUANTUM PHASE TRANSITIONS OF ULTRACOLD OE22 ATOMS IN OPTICAL LATTICES: DYNAMICAL MEAN FIELD THEORY STUDIES <u>A. Sotnikov</u> and W. Hofstetter
- 16-40 17-00 DIAMAGNETIC DOMAINS AND NONLINEAR OE18 ELECTROMAGNETIC WAVES IN METALS V.G. Peschansky and D.I. Stepanenko
- 17-00 17-20 THEORY OF HOMOGENEOUS/HETEROGENEOUS OE8 CHEMICAL REACTION WITH PRE-SATURATION D.Yu. Kopiychenko and P.O. Mchedlov-Petrossyan
- 17-20 17-40
   ON PHASE TRANSITIONS IN THE SYSTEM OF CHARGED

   OE13
   FERMI PARTICLES ABOVE THE LIQUID DIELECTRIC

   SURFACE
   D.M. Lytvynenko and Yu.V. Slyusarenko
- 18-00 21-00 Visit to Museum of Kharkov University and Welcome Party<sup>5</sup>

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<sup>&</sup>lt;sup>5</sup> See Plan of the KNU building, Fig. 5, page 31

# Tuesday, August 30, 2011

# Plenary Session (New Physical Sinelnikov Lecture Hall<sup>6</sup>, KNU)

#### Chairman A.Sokolovsky

- 9-00 9-30 THEORY OF THE HETEROPHASE FLUCTUATIONS IN PLE1 THE VICINITY OF A CRITICAL POINT OF AN AMORPHOUS STATE A.S. Bakai
- 9-30 10-00 STRING FRAGMENTATION MODEL WITH QUARK SPIN PLC1 X. Artru
- 10-00 10-30 FRASCATI'S BTF/SPARC FACILITIES AND RADIATION PLB1 RELATED PROJECTS S.B. Dabagov
- 10-30 11-00 LOW BOUND ON THE MAGNETIC FIELD STRENGTH IN PLC6 THE HOT UNIVERSE M. Bordag, E. Elizalde and V. Skalozub
- 11-00 11-30 Coffee Break

#### **Chairman S.Dabagov**

- 11-30 12-00 UNRUH EFFECT AND SOME HIGH ENERGY PLD3 EXPERIMENTS K.A. Ispirian
- 12-00 12-30 HIGH-ENERGY DIFFRACTION OF PARTICLES AND PLC3 NUCLEI L.L. Jenkovszky
- 12-30 13-00 LÉVY FLIGHTS AND FRACTIONAL BROWNIAN MOTION PLD2 AS THE PARADIGMS OF ANOMALOUS TRANSPORT A. Chechkin

13-30 - 14-30 Lunch

<sup>&</sup>lt;sup>6</sup> See Plan of the KNU building, Fig. 3, page 31

# Section A (New Physical Sinelnikov Lecture Hall<sup>7</sup>, KNU)

#### Chairman A.Zheltukhin

- 14-40 15-00 IS FIELD-INDUCED FERROMAGNETIC PHASE OA10 TRANSITION IN THE MAGNETAR CORE ACTUALLY POSSIBLE? A.A. Isayev
- 15-00 15-20 DIFFUSION IN COLD AND HEAT VACUA WITHIN THE OA16 FRAMEWORK OF STOCHASTIC HYDRODYNAMICS O.N. Golubjeva, V.G. Baryakhtar, A.D. Sukhanov
- 15-20 15-40 SPIN, CONFINEMENT, LOCALIZATION AND PA1 SUPERSYMMETRY D.J. Cirilo-Lombardo
- 15-40 16-00 ABOUT THE ACCOUNT OF ENERGY-MOMENTUM OA17 CONSERVATION LAW AT THE CALCULATION OF HADRON-HADRON INELASTIC SCATTERING CROSS-SECTION I.V. Sharf, V.D. Rusov, <u>A.V. Tykhonov</u>, M.A. Delyiergyiev, G.O. Sokhrannyi, N.A. Podolyan
- 16-00 16-20 Coffee Break

#### Chairman A.Isaev

- 16-20 16-40 THE DYNAMIC OF SQUEEZED STATES IN MULTI-WELL OA2 POTENTIALS V.P. Berezovoj, and M.I. Konchatnij
- 16-40 17-00 NECESSARY GENERALIZATION OF KLEIN-GORDON AND OA12 DIRAC EQUATIONS AND EXISTENCE OF PARTICLE GENERATIONS Yu. V. Kulish, E.V. Rybachuk
- 17-00 17-20 MODEL-INDEPENDENT Z' SEARCHES AT MODERN OA9 COLLIDERS <u>A.V. Gulov</u> and A.A. Kozhushko
- 17-20 17-40 PHYSICAL ELECTRON AS SELF-LOCALIZED OA7 EXCITATION OF THE ELECTRON-POSITRON FIELD I.D. Feranchuk and A.A. Ivanov

<sup>&</sup>lt;sup>7</sup> See Plan of the KNU building, Fig. 3, page 31

# Section C (Large Physical Lecture Hall<sup>8</sup>, KNU)

#### Chairman D.Anchishkin

- 14-40 15-00 VECTOR TO PSEUDOSCALAR MESON RADIATIVE OC3 TRANSITIONS IN CHIRAL THEORY WITH RESONANCES S.A. Ivashyn
- 15-20 15-40 PROMPT PHOTON PRODUCTION IN PROTON–PROTON OC5 SCATTERING AT ULTRARELATIVISTIC ENERGIES <u>V.V. Kotlyar</u>, N.V. Krupina
- 15-20 15-40 J/Ψ, Y, AND B MESONS PRODUCTION IN *pp* COLLISIONS AT OC6 THE LHC V.V. Kotlyar, N.V. Krupina
- 15-40 16-00 GAMOW APPROACH TO CALCULATING THE OC12 TEMPERATURE OF THE BACKGROUND RADIATION: IS IT VALID IN THE ACCELERATED UNIVERSE? Yu.P. Stepanovsky
- 16-00 16-20 Coffee Break

#### Chairman V.Skalozub

- 16-20 16-40 RADIATIVE QUARKS MASSES AT MSSM OC9 M.C. Rodriguez
- 16-40 17-00 AXION MECHANISM OF THE SUN LUMINOSITY AND OC7 SOLAR DYNAMO-GEODYNAMO CONNECTION V.D. Rusov, E.P. Linnik, K. Kudela, S.Cht. Mavrodiev, I.V. Sharph, T.N. Zelentsova, M.E. Beglaryan, V.P. Smolyar, <u>K.K. Merkotan</u>
- 17-00 17-20 ON SOME PROPERTIES OF TURBULENT QUARK-GLUON OC4 PLASMA M.R. Kirakosyan

17-20 - 17-40 NON-LINEAR EFFECTS AT IONIZATION OF HYDROGEN OC11 ATOMS IN THE STRONG PULSED LIGHT FIELD S.S. Starodub, S.P. Roshchupkin

<sup>&</sup>lt;sup>8</sup> See Plan of the KNU building, Fig. 2, page 30

# Section E (VI-52 Tarapov Lecture Hall<sup>9</sup>, 6th fl., KNU)

#### Chairman M.Kovalevsky

- 14-40 15-00 MARTENSITIC TRANSITION BCC-HCP: THE THREE OE12 ORDER PARAMETERS THEORY V.A. Lykah and E.S. Syrkin
- 15-00 15-20 AUTOCATALYTIC PROCESSES OF PLASTIC OE10 DEFORMATION IN POLYCRYSTAL METALS AND ALLOYS V.V. Krasilnikov, M.N. Bronnikova, and S.E. Savotchenko
- 15-20 15-40 TO THE STATISTICAL DESCRIPTION OF COULOMB LIKE OE11 SYSTEM <u>B.I. Lev</u> and A.G. Zagorodny
- 16-00 16-20 Coffee Break

#### Chairman V.Krasilnikov

- 16-20 16-40 MIGRATION OF MAGNETIC REGIONS ON THE SUN OE23 <u>A.A. Stanislavsky</u> and A.A. Koval
- 16-40 17-00 CREATION AND ANNIHILATION PROCESSES ON HE II OE1 SOLID INTERFACE I.N. Adamenko, E.K. Nemchenko
- 17-00 17-20 NUCLEATION UNDER BCC-HCP TRANSITION IN <sup>4</sup>He
   OE14 <u>N.P. Mikhin</u>, A.P. Birchenko, E.Ya. Rudavskii, and Ye.O. Vekhov

<sup>&</sup>lt;sup>9</sup> See Plan of the KNU building, Fig. 4, page 31

# Wednesday, August 31, 2011 Plenary Session (Large Hall, KIPT)

#### Chairman X.Artru

- 9-00 9-30 CHAOTIC UNIVERSE
  - PLC2 Yu.L. Bolotin and V.V. Yanovsky
- 9-30 10-00 ION ACOUSTIC TURBULENCE IN PLASMAS WITH PLF3 ANISOTROPICALLY HEATED IONS V.P. Silin
- 10-00 10-30 COHERENT INTERACTIONS OF HIGH-ENERGY PARTICLES PLB2 IN A BENT CRYSTAL V. Guidi
- 10-30 11-00 ASTROPHYSICAL THEORY OF THE EARTH GLOBAL PLF2 CLIMATE ON DIFFERENT TIME SCALES: COMPARISON WITH EXPERIMENT AND FORECAST <u>V.D. Rusov</u>, E.P. Linnik, V.N. Vaschenko, S. Cht. Mavrodiev, M.E. Beglaryan, K. Kudela, T.N. Zelentsova, V.A. Tarasov, D.A. Litvinov, V.P. Smolyar, B. Vachev
- 11-00 11-30 Coffee Break

#### **Chairman A.Korchin**

- 11-30 12-00 POLARIZATION EFFECTS IN ELASTIC PROTON-ELECTRON PLB6 SCATTERING <u>Egle Tomasi-Gustafsson</u>, G.I. Gakh, A. Dbeyssi, D. Marchand, V.V. Bytev
- 12-00 12-30 NONRELATIVISTIC QUANTUM THEORY OF STIMULATED PLA5 CHERENKOV RADIATION AND COMPTON SCATTERING IN PLASMA A.A. Rukhadze and M.V. Kuzelev
- 12-30 13-00 PHASE TRANSITIONS IN COLD PLASMA INDUCED BY PLE4 EXTERNAL ACOUSTIC FIELDS <u>A.R. Mkrtchyan</u>, A.G. Mkrtchyan, and A.S. Abrahamyan
- 13-00 13-30 NEW DEVELOPMENTS IN STUDY OF HIGH ENERGY PLB7 PARTICLE INTERACTION WITH CRYSTALS IN CERN V.V. Tikhomirov
- 13-30 14-30 Lunch

# Section B (Large Hall, KIPT)

#### Chairman N.Merenkov

- 14-40 15-00 LECTRON-POSITRON PAIR PHOTOPRODUCTION WITH OB4 RADIATION OF A PHOTON IN MAGNETIC FIELD AT NONRESONANT REGIME P.I. Fomin and <u>R.I. Kholodov</u>
- 15-00 15-20 THE PREWAVE ZONE EFFECTS IN TRANSITION RADIATION OB14 AND BREMSSTRAHLUNG BY RELATIVISTIC ELECTRON WITH NONEQUILIBRIUM FIELD N.F. Shul'ga, <u>S.V. Trofymenko</u>, V.V. Syshchenko
- 15-20 15-40 RESONANT PAIR PRODUCTION UNDER SCATTERING OF AN OB16 ELECTRON IN THE FIELD OF AN ELECTROMAGNETIC WAVE <u>A.I. Voroshilo</u>, S.P. Roshchupkin, and V.N. Nedoreshta
- 15-40 16-00 QED AND QCD RADIATIVE CORRECTIONS TO PROCESSES OB6 ON LEPTON AND HADRON COLLIDERS E.A. Kuraev
- 16-00 16-20 Coffee Break

#### Chairman S.Roshchupkin

- 16-20 16-40 ANGULAR DISTRIBUTION AND POLARIZATION OF OB2 RADIATION BY RELATIVISTIC ELECTRON IN A THIN CRYSTAL <u>A.S. Fomin</u> and N.F. Shul'ga
- 16-40 17-00 FOCUSING OF PARAMETRIC X-RAY RADIATION EMITTED OB13 BY RELATIVISTIC PARTICLES MOVING RECTILINEARLY IN BENT CRYSTAL V. Guidi, <u>A.V. Shchagin</u>
- 17-00 17-20 INFLUENCE OF THE INTENSIVE PULSE LASER FIELD ON OB10 THE SCATTERING OF A PHOTON BY AN ELECTRON V.N. Nedoreshta, S.P. Roshchupkin, and A.I. Voroshilo
- 17-20 17-40 CRYSTAL THICKNESS OPTIMIZATION AS A WAY TO PB14 IMPROVE THE LHC UPGRADE COLLIMATION SYSTEM V.V. Tikhomirov, and A.I. Sytov

17-40 - 18-20 Film

# Sections C, F (Small Hall, KIPT)

#### Chairman V.Gusynin

- 14-40 15-00 ON REGULAR GEONS IN GENERAL RELATIVITY AND OC8 DARK MATTER IN GALAXIES V.P. Olyeynik
- 15-00 15-20 HOLOGRAPHIC DYNAMICS AS A WAY TO SOLVE THE OC1 BASIC COSMOLOGICAL PROBLEMS Yu.L. Bolotin, O.A. Lemets, <u>D.A. Yerokhin</u>, L.G. Zazunov
- 15-20 15-40 OPTIMAL FLAME CAPTURING MODEL FOR TYPE IA OC14 SUPERNOVA SIMULATIONS A.V. Zhiglo
- 15-40 16-00 ACCELERATIONS OF PARTICLES BY BLACK HOLES OC13 O.B. Zaslavskii

#### Chairman Yu.Slyusarenko

- 16-20 16-40 LOW PRESSURE DISCHARGE INDUCED BY MICRO- WAVE OF6 RADIATION WITH STOCHASTIC JUMPING PHASE <u>V. I. Karas`</u>, A.F. Alisov, A.M. Artamoshkin, O.V. Bolotov, V.I. Golota, A.M. Egorov, I.V. Karas`, I.F. Potapenko, A.N. Starostin, I.A. Zagrebelny
- 16-40 17-00 ON GEOMETRY OF NAVIER-STOKES EQUATIONS OF5 V.S. Dryuma
- 17-00 17-20 ANNULAR BILLIARDS AS A PARADIGM FOR QUANTUM OF4 FRACTALS V.A. Cherkaskiv

# Poster Session (Lobby, KIPT)

# Sections A, D, E

#### Chairman A.Kirdin

# Section A

OA4

BARGMANN-WIGNER GENERALIZATIONS OF THE RELATIVISTIC WAVE EQUATIONS, ARBITRARY SPIN AND THE INTERACTION PROBLEM

D.J. Cirilo-Lombardo

#### PA2

ON SUPER CUNTZ ALGEBRAS S. Duplij

#### PA3

ON QUIVERS, HOPF QUIVERS, THEIR REPRESENTATIONS AND SUPERSYMMETRIC GENERALIZATIONS <u>S. Duplij</u> and G.Ch. Kurinnoj

#### PA4

GENERAL PROPERTIES OF INTERACTION CURRENTS OF HIGHER SPIN FERMIONS AND THEIR CONSEQUENCES FOR  $\pi N$ -SCATTERING

Yu. V. Kulish, E.V. Rybachuk

#### PA5

ON 2D MASSLESS FIELD WAVE EQUATIONS I.E. Ovcharenko, Yu.P. Stepanovsky

#### PA6

GRASSMANN DYNAMICS OF CLASSICAL SPIN IN NONABELIAN GAUGE FIELDS S.A. Pol'shin

#### PA7

ON QUANTIZATION OF NON-LINEAR COMPLEX SCALAR FIELD WITH SPONTANEOUSLY BROKEN SYMMETRY Yu.M. Poluektov

#### PA8

NAMBU-LIKE GRASSMANN-ODD BRACKETS ON SUPERMANIFOLDS <u>D.V. Soroka</u> and V.A. Soroka

PA9

GENERALIZATIONS OF SCHOUTEN-NIJENHUIS BRACKET AND YANG-BAXTER EQUATION D.V. Soroka and <u>V.A. Soroka</u>

PA10

GRASSMANN-ODD NAMBU BRACKET ON ANTICOMMUTATIVE VARIABLES D.V. Soroka and V.A. Soroka

PA11

NAMBU-LIKE GRASSMANN-ODD BRACKET ON ANTICOMMUTATIVE VARIABLES D.V. Soroka and <u>V.A. Soroka</u>

# PA12

RENORMALIZATION OF QUANTUM FIELD MODEL FOR OPEN SYSTEM INTERACTION V.I. Tykhonov, A.V. Tykhonov

# Section D

# PD1

FINAL DISTRIBUTION DENSITY OF FRAGMENTS SIZES IN SCALE-NONINVARIANT SLOW FRAGMENTATION Yu.P.Virchenko, <u>R.Ye.Brodskii</u>

# PD2

LONG-TIME BEHAVIOR OF THE CONTINUOUS-TIME RANDOM WALK WITH A SUPERHEAVY-TAILED DISTRIBUTION OF WAITING TIMES

S.I. Denisov, Yu.S. Bystrik, and H. Kantz

# PD3

NON-EQUILIBRIUM REVERSIBLE DYNAMICS OF WORK PRODUCTION IN 4 SPIN SYSTEM IN MAGNETIC FIELD AND EMERGENCE OF ATTRACTOR UNDER UNITARY EVOLUTION E.A.Ivanchenko

# PD4

POLARIZATION FEATURES OF ACOUSTIC SPECTRA IN UNIAXIAL AND BIAXIAL NEMATIC LIQUID CRYSTALS M.Y. Kovalevsky, L.V. Logvinova, <u>V.T. Matskevych</u>

#### PD5

LOW-FREQUENCY GREEN FUNCTIONS ASYMPTOTICS IN UNIAXIAL AND BIAXIAL NEMATIC LIQUID CRYSTALS V.T. Matskevych

#### PD6

TO THE GROSS-PITAEVSKII DYNAMICS OF CONDENSATE AS A SUBSYSTEM OF SUPERFLUID BOSE GAS <u>A.I. Sokolovsky</u>, N.N. Bannikova

#### PD7

HYDRODYNAMICS OF SUPERFLUID BOSE LIQUID AS A ONE-COMPONENT SYSTEM <u>A.I. Sokolovsky</u>, N.G. Gusevik

### PD8

TO KINETICS OF POLARON IN THE BOGOLYUBOV REDUCED DESCRIPTION METHOD S.A. Sokolovsky

#### PD9

ANGLE-DEPENDENT CYCLOTRON RESONANCE IN ORGANIC Q2D CONDUCTORS

D.I. Stepanenko

# Section E

#### PE1

SOLIDIFICATION KINETICS OF PURE Sn SINGLE DROPS: EFFECT OF NANO-SIZE NUCLEATION SITES

A.S. Abyzov, J.W.P. Schmelzer, B. Yang, Y. Gao, and C. Schick

# PE2

STRESS INDUCED PORE FORMATION IN A CRYSTALLIZING DIOPSIDE GLASS: GENERALIZED GIBBS APPROACH <u>A.S. Abyzov</u>, J.W.P. Schmelzer, V.M. Fokin

#### PE3

HOMOGENEOUS BUBBLE NUCLEATION LIMIT OF LEAD A.S. Abyzov, J.W.P. Schmelzer, L.N. Davydov, and V.V. Slezov

# PE4

STATIC AND ORIENTATIONAL ORDER IN CO<sub>2</sub>–Kr V.V. Danchuk, A.A. Solodovnik

#### PE5

ONE-DIMENSIONAL HOPPING TRANSPORT IN ENERGETICALLY DISORDERED SYSTEMS IN PRESENCE OF A STRONG BIASED FIELD M.P. Fateev

#### PE6

EFFECTIVE-MEDIUM APPROXIMATION FOR THE FIELD DEPENDENCE OF THE HOPPING TRANSPORT IN DISORDERED SYSTEMS M P Fateev

### PE7

AN ACOUSTIC ECHO EFFECT IN DAVYDOV-ZAKHAROV SYSTEMS WITH INCOHERENT HIGH-FREQUENCY FIELDS E.A.Fedutenko

### PE8

CORRELATION THEORY OF CONCENTRATION DECOMPOSITION OF A SUBMONOLAYER FILM UNDER SORPTION PROCESSES E.P. Feldman, K.V. Gumennyk, L.I. Stefanovich

### PE9

MEAN-FIELD, ISING-LIKE BEHAVIOR AND EXPERIMENT NEAR THE CRITICAL POINT OF PURE LIQUIDS D.Yu. Ivanov

# PE10

WAVE PACKETS TRANSMISSION THROUGH OPEN MESOSCOPIC SYSTEMS N.A. Ivanov, V.V. Scalozub

# PE11

ON THE THEORY OF NON-LOCAL EFFECTS IN SUPERFLUID BOSE-GAS

A.P. Ivashin, Yu.M. Poluektov

# PE12

INDUCED CORRELATIONS IN MULTICOMPONENT DIFFUSIVE SYSTEMS

O.V. Kliushnychenko and S.P. Lukyanets

# PE13

EFFECTS OF ANOMALOUS DIFFUSIVE TRANSPORT CAUSED BY PARTICLE DISTINGUISHABILITY <u>S.P. Lukyanets</u> and O.V. Kliushnychenko PE14

BOSE-FERMI-HUBBARD MODEL IN THE WEAK BOSON-FERMION COUPLING REGIME

T.S. Mysakovych

### PE15

THE POLARIZATION PROPERTIES OF ATOMIC BOSE GAS IN A COHERENT STATE Yu.M. Poluektov

# PE16

ON THEORY OF ELECTRIC EFFECTS IN THE SECOND SOUND WAVE Yu.M. Poluektov

# PE17

GROSS-PITAEVSKII EQUATIONS FOR A CONDENSATE OF ATOMS WITH ELECTRONIC STRUCTURE

Yu.M. Poluektov

# PE18

ON DYNAMICS OF INTERACTING BOSE GAS WITH RELAXATION Yu.M. Poluektov

### PE19

ON POLARIZATION OF HELIUM ATOMS BY ACCELERATION <u>Yu.M. Poluektov</u>, V.N. Savchenko

# PE20

FLUCTUATION EFFECTS IN  $^3\mathrm{He}\textsc{-}^4\mathrm{He}$  SOLID MIXTURES BEFORE THE PHASE SEPARATION

T.N. Antsygina, K.A. Chishko, A.A. Lisunov, V.A. Maidanov, V.Yu. Rubanskyi, <u>S.P. Rubets</u>, E.Ya. Rudavskii

# PE21

EFFECT OF CHANGE OF EXTERNAL PARAMETERS ON THE NUCLEATION AND GROWTH OF NEW PHASE CLUSTERS <u>R.V. Shapovalov</u>, A.S. Abyzov, L.N. Davydov, V.V. Slezov

# **PE22**

THE LIMIT SOLUBILITY RELATIONSHIPS BASED ON FRENKEL'S HETEROPHASE FLUCTUATIONS THEORY <u>R.V. Shapovalov</u>, O.A. Osmayev

# PE23

UNITARITY OF SINGLET AND TRIPLET SUPERFLUID STATES AT SCALAR AND VECTOR QUASIPARTICLE ENERGY MATRIX IN NUCLEAR MATTER S. Shulga

#### PE25

ENERGY SPECTRUM AND DIAGRAMS OF STATES OF THE IONIC PAULI CONDUCTOR

I.V. Stasyuk, R.Ya. Stetsiv and O.A. Vorobyov

### PE26

HYDRODYNAMIC THEORY OF PLASMA OSCILLATIONS IN THE PRESENCE OF ELECTRON DENSITY CORRELATIONS A. Stupka

# PE27

SIZE EFFECTS IN THE [N(CH<sub>3</sub>)<sub>4</sub>]<sub>2</sub>Zn<sub>0.58</sub>Cu<sub>0.42</sub>Cl<sub>4</sub> CRYSTALS <u>S. Sveleba</u>, I. Karpa, I. Katerynchuk, O. Semotyuk, I. Kunyo,

### PE28

MAGNETIC SUSCEPTIBILITIES OF DENSE SUPERFLUID NEUTRON MATTER WITH SPIN-TRIPLET PAIRING FOR MODELS WITH CONVENTIONAL AND GENERALIZED SKYRME FORCES A.N. Tarasov

### PE29

TWO-DIMENSIONAL RANDOM LONG-RANGE CORRELATED DYNAMICAL SYSTEMS A.V. Shkop, D.A. Tkanov, and O.V. Usatenko

PE30

LONG-RANGE CORRELATIONS IN THE GENETIC SEQUENCES A.A. Maistrenko, S.S. Melnik, and <u>O.V. Usatenko</u>

# PE31

UPPER ESTIMATES OF PERCOLATION THRESHOLDS IN THE SITE PROBLEM ON UNIFORM THREE-DIMENSIONAL CRYSTAL LATTICES E.S. Antonova, <u>Yu.P. Virchenko</u>

# Thursday, September 01, 2011 Plenary Session (Large Hall, KIPT)

#### Chairman V.Guidi

- 9-00 9-30 PHYSICAL BASIS OF ADVANCED FAST REACTOR PLF1 WORKING IN NUCLEAR BURNING WAVE REGIME <u>S.P. Fomin</u>, A.S. Fomin, Yu.P. Mel'nik, V.V. Pilipenko, and N.F. Shul'ga
- 9-30 10-00 CRITICAL PHENOMENA AND CRITICAL DIMENSIONS PLE3 <u>V.F. Klepikov</u>, A.V. Babich, S.V. Berezovsky, L.N. Kitcenko
- 10-00 10-30 GAMMA-RADIATION OF PULSARS AS A RESULT OF PLB3 INVERSE COMPTON SCATTERING AT ACCELERATION ELECTRONS IN A PULSAR VACUUM GAP V. M. Kontorovich, A.B. Flanchik
- 10-30 11-00 LINEAR AND NONLINEAR KINETIC EQUATIONS FOR PLD5 STATE POPULATIONS OF QUANTUM SYSTEMS E.G. Petrov
- 11-00 11-20 Coffee Break

# Section F (Large Hall, KIPT)

### Chairman Yu.Bolotin

11-20 - 11-50 EXCITATION AND PROPERTIES OF LARGE AMPLITUDE OF8 SOLITON NEAR FOIL AT LASER PULSE INTERACTION WITH IT

A.M. Egorov, V.I. Maslov, I.N. Onishchenko, I.P. Yarovaya

- 11-50 12-20 DYNAMIC CHAOS IN LINEAR SYSTEMS OF3 V.A. Buts
- 12-20 12-40 STOCHASTIC MECHANISM OF 1-10 GeV/c CHARGED OF7 PARTICLES DEFLECTION BY A BENT CRYSTAL <u>I.V. Kirillin</u>, N.F. Shul'ga, and V.I. Truten'

12-40 - 13-00 DYNAMICS AND ENERGY SPECTRA OF DISCRETE OF2 BREATHERS AND SOLITON COMPLEXES IN HIGHLY-DISPERSIVE MEDIA <u>M.M. Bogdan</u>, O.V. Charkina, and D.V. Laptev 13-00 - 13-20 Making conference group photograph

13-30 - 14-30 Lunch

# Section D (Large Hall, KIPT)

#### Chairman E.Petrov

- 14-40 15-00 TO THE LANDAU THEORY OF RELAXATION PHENOMENA OD7 IN PLASMA A.I. Sokolovsky, V.N. Gorev, Z.Yu. Chelbaevsky
- 15-00 15-20 NON-EQUILIBRIUM PARTICLES DISTRIBUTION OF OD2 KOLMOGOROV-TYPE AND THEIR APPLICATIONS V.I. Karas`, V.E. Zakharov
- 15-20 15-40 FLUCTUATION THEORY OF HEAT RADIATION OD9 CONDUCTANCE <u>Yu.P. Virchenko</u>, M.A. Saprykin
- 15-40 16-00 SCHRÖDINGER EQUATION AS EQUATION FOR STABLE OD3 MOTION OF CLASSICAL PARTICLES IN FLUCTUATION-DISSIPATIVE ENVIRONMENT V.D.Rusov, <u>K.A.Lukin</u> and D.S. Vlasenko
- 16-00 16-20 Coffee Break

#### Chairman K.Lukin

- 16-20 16-40 TO THE AKHIEZER THEORY OF HEAT CONDUCTIVITY OF OD8 INSULATORS S.A. Sokolovsky
- 16-40 17-00 DOMAIN OF APPLICABILITY OF VARIOUS APPROACHES OD4 TO DESCRIPTION OF ELECTROMAGNETIC FIELD IN MEDIUM S.F. Lyagushyn, A.I. Sokolovsky, and Yu.M. Salyuk

 17-00 - 17-20
 ON THE LONG WAVE FLUCTUATIONS IN SYSTEMS OF

 OD5
 PARTICLES INTERACTING WITH HYDRODYNAMIC MEDIA

 S.O.Nikolayenko
 and Yu.V.Slyusarenko

# Section E (Small Hall, KIPT)

#### **Chairman B.Lev**

- 11-20 11-50 ADVANCED BOGOLYUBOV MODEL OF IMPERFECT BOSE OE3 GAS AND SUPERFLUIDITY N.N. Bogolyubov, Jr., <u>D.P. Sankovich</u>
- 11-50 12-20 ON THE THEORY OF PHASE TRANSITIONS IN DENSE OE25 NEUTRON MATTER WITH GENERALIZED SKYRME INTERACTION AND ANISOTROPIC SPIN-TRIPLET PAIRING IN STRONG MAGNETIC FIELD A.N. Tarasov
- 12-20 12-40 DIFFUSION IN MOMENTUM OF CHARGED PARTICLES IN OE16 THE EXTERNAL PERIODIC FIELDS V.V. Ognivenko
- 12-40 13-00 RESONANCES IN SUPERFLUID <sup>4</sup>He DETECTOR AND OE19 HEATER – <sup>4</sup>He SYSTEMS K.E. Nemchenko, <u>S.Yu. Rogova</u>
- 13-00 13-20 Making conference group photograph
- 13-30 14-30 Lunch

# Sections E (Small Hall, KIPT)

#### Chairman V.Khodusov

- 14-40 15-00 GIBBS EQUILIBRIUM AVERAGES AND BOGOLYUBOV OE21 MEASURE D. P. Sankovich
- 15-00 15-20 A NOVEL PHASE TRANSITION IN 2D ELECTRON SYSTEM OE15 OVER LIQUID K.A. Nasyedkin and V.E. Syvokon
- 15-20 15-40 NUMERICAL CALCULUS OF NEUTRON TEMPERATURE OE20 OSCILLATIONS IN CONTROLLED NUCLEAR SYSTEMS V.A.Rudakov, A.A.Vodyanitskii
- 16-00 16-20 Coffee Break

# Sections F (Small Hall, KIPT)

#### Chairman A.Tarasov

- 16-20 16-40 NONLINEAR ROTOR DYNAMICS OF 2D MOLECULAR ARRAY: OF11 FROM LIBRATION TO ROTATION V.A. Lykah and E.S. Syrkin
- 16-40 17-00 INFORMATION MODELING THE DINAMICS OF THE OF9 QUANTUM STATE UNDER WEAK CONTINUOUS MEASUREMENTS <u>S.I. Melnyk</u>, S.S. Melnyk
- 17-00 17-20 DYNAMICAL CHAOS IN SUPER-SYMMETRICAL POTENTIALS OF1 WITH PERIODIC PERTURBATION V.P.Berezovoj, Yu.L.Bolotin, V.Yu.Gonchar, and M.I.Konchatnij
- 17-20 17-40 SELF-ORGANIZATION OF INHOMOGENEOUS COLLISIONAL OF13 MAGNETIZED PLASMA AND REGULARIZATION OF THE NONLINEAR THEORY OF PERTURBATION A.A. Vodyanitskii
- 17-40 18-00 METHOD OF MATRIX LINEARIZATION FOR NONLINEAR OF10 MODELS: "REACTION-DRIFT-DIFFUSION" V.N. Robuk
- 19-00 21-00 Conference Dinner

# **Poster Sessions**

# **Section B**

#### PB1

PERTURBATIVE ACCOUNT OF NUCLEAR SCATTERING AT VOLUME REFLECTION M.V. Bondarenco

#### PB2

CLASSIFICATION OF ANTIPROTON PROTON ANNIHILATION REACTIONS INTO HADRONIC CHANNELS <u>A. Dbeyssi</u> and E. Tomasi-Gustafsson

#### PB3

RESONANCE ANNIHILATION OF ULTRARELATIVISTIC ELECTRON PAIR IN THE LIGHT FIELD O.I. Denisenko, S.P. Roshchupkin PB5

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POLARIZATION PHENOMENA IN THE ELASTIC ELECTRON-
NUCLEON SCATTERING
V.N. Maslov, and Yu.P. Stepanovsky
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#### PB6

ABOUT THE POSSIBILITY TO MEASURE THE CIRCULAR POLARIZATION OF HIGH ENERGY PHOTON IN REACTION  $\gamma + e^- \rightarrow e^+ + e^- + e^-$ 

G.I. Gakh, M.I.Konchatnij, I.S. Levandovskij and N.P. Merenkov

### PB7

ANALYSIS OF POLARIZATION OBSERVABLES AND RADIATIVE EFFECTS FOR THE REACTION  $\overline{p} + p \rightarrow e^+ + e^-$ 

G.I. Gakh, N.P. Merenkov, and E. Tomasi-Gustafsson

# PB8

POLARIZED PHOTON EMISSION FROM RELATIVISTIC PLANAR CHANNELED POSITRONS IN CRYSTAL M.G. Shatney

### PB9

FOCUSING OF PARAMETRIC X-RAY RADIATION EMITTED BY RELATIVISTIC PARTICLES MOVING IN A CRYSTAL ALONG BENT ATOMIC ROWS N.F. Shul'ga and A.V. Shchagin

# PB10

INCOHERENT BREMSSTRAHLUNG IN FLAT AND BENT CRYSTALS V.V. Syshchenko, A.I. Tarnovsky and N.F. Shul'ga

# PB11

ON THE COHERENT RADIATION BY RELATIVISTIC ELECTRONS AND POSITRONS IN CRYSTALS AT ULTRAHIGH ENERGIES N.F. Shul'ga and <u>V.I. Truten'</u>

# PB12

ON THE ANALOGY BETWEEN THE RADIATION PROCESSES IN COLLISIONS OF BUNCHES OF RELATIVISTIC CHARGED PARTICLES AND AT PASSAGE OF RELATIVISTIC PARTICLES IN MATTER N.F. Shul'ga and <u>D.N. Tyutyunnik</u>

# PB13

AHARONOV-BOHM EFFECT: ANALYSIS OF SCATTERING IN THE FORWARD DIRECTION N.D. Vlasii

# Section C

PC1

ON GENERALIZED AFFINE GEOMETRIES, DYNAMICAL TORSION AND SPIN

D.J. Cirilo-Lombardo

#### PC2

LOW-ENERGY PARAMETERS OF THE NUCLEON-NUCLEON SCATTERING AND DEUTERON PROPERTIES <u>E.A. Dubovik</u>, A.V. Shebeko

#### PC3

AN INTERACTION OF COSMIC HIGH-ENERGY PHOTONS AND LEPTONS WITH NEUTRALINO DARK MATTER A.B. Flanchik

#### PC4

GENERAL ANALYSIS OF POLARIZATION EFFECTS IN  $\gamma + d \rightarrow d + \pi + \pi$  REACTION

G.I. Gakh, A.P. Rekalo, and A.G. Gakh

#### PC5

RARE DECAY  $B \rightarrow K^*l^+l^-$  AND POSSIBLE EEFECTS OF NEW PHYSICS <u>A.Yu. Korchin</u>, V.A. Kovalchuk, and D.O. Lazarenko

#### PC6

THE PARAMETRIC SPACE OF THE TWO-HIGGS DOUBLET MODEL AND SAKHAROV'S BARYOGENESIS SCENARIO <u>A.A. Kozhushko</u> and V.V. Skalozub

#### PC7

COSMIC STRING DYNAMICS IN PP-WAVES BACKGROUND S.N. Roshchupkin

#### PC8

SEMI-SIMPLE TENSOR EXTENSION OF THE (SUPER) POINCARE ALGEBRA D.V. Soroka and V.A. Soroka PC9

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EXTENDED SEMI-SIMPLE GENERALIZATION OF THE SUPER-POINCARE ALGEBRA D.V. Soroka and V.A. Soroka

PC10

EXTENSION OF THE Sp(2,C) GROUP FOR DESCRIPTION OF A THREE-BODY SYSTEM I.V. Uvarov, A.P. Yaroshenko

PC11

EFFECTS OF CURVATURE ON THE FLAME IN FLAME CAPTURING TECHNIQUE A.V. Zhiglo

# PC12

THE STRUCTURE OF AN ACCRETION DISC IN A TYPE IA SUPERNOVA PROGENITOR SYSTEM A.V. Zhiglo

# Section F

PF1

CHARACTER CALCULATIONS OF APPROXIMATE INTEGRALS OF MOTION FOR HAMILTONIAN SYSTEMS WITH *n* DEGREES OF FREEDOM

V.Ye. Bogachev and N.A. Chekanov

# PF2

DYNAMIC CHAOS IN DYNAMIC SYSTEMS WITH ONE DEGREE OF FREEDOM V.A. Buts

# PF3

ON AN APPROACH TO GENERALIZING CLASSICAL NONLINEAR CONFORMAL ELECTRODYNAMICS <u>S. Duplij</u>, G.A. Goldin, and V.M. Shtelen

PF4

LOCALIZATION OF REAL POLYMER CHAINS AT TWO HARD WALLS <u>I.V. Gerasimchuk</u> and V.S. Gerasimchuk

PF6

#### CAUCHY'S THEOREM FOR DELONE-GEOMETRY CHAOS A.M. Gurin, A.N. Popov

#### PF7

# ENTANGLEMENT DYNANICS IN QUTRIT CHAIN

E.A. Ivanchenko

# PF8

GIANT BARKHAUZEN JUMPS AND STOHASTIC RESONANCE IN BISTABLE FERROMAGNETIC COFENB ALLOY N.A. Azarenkov, V.G. Kirichenko, O.V. Kovalenko, V.N. Leonov

# PF9

THE INFLUENCE OF SURFACE NANOLAYERS' STRUCTURE ON CHAOS IN YIG FILMS V.G. Kirichenko, O.V. Kovalenko, V.N. Leonov

# PF11

ON ZONE STRUCTURE FORMATION OF TRANSVERSAL MOTION ENERGY LEVELS OF FAST CHARGED PARTICLE AT CHANNELING N.F. Shul'ga, <u>A.V. Kozlov</u>, V.A. Cherkaskiy

# PF12

LONG-RANGE INTERACTION IMPACT ON NONLINEAR DYNAMICS N. Laskin

# PF13

THEOREM ABOUT THE NUMBER AND STRUCTURE OF SINGULAR POINTS IN N-DIMENSIONAL DYNAMICAL SYSTEM OF LOTKA-VOLTERRA POPULATION DYNAMICS V.M. Moskovkin, Bilal N.E. Suleiman

# PF14

DIFFUSE PART OF REFLECTION FROM STRUCTURED BORDER D.M. Naplekov

# PF15

FEATURES OF TRANSITION FROM LAMINAR FLOW TO CLASSICAL AND QUANTUM TURBULENCE IN SUPERFLUID <sup>4</sup>He <u>G. Sheshin</u>, V. Chagovets, I. Grytsenko, E. Rudavskii, A. Zadorozhko

# PF16

KRAMERS PROBLEM IN ANOMALOUS DYNAMICS <u>O.Yu. Sliusarenko</u>, V.Yu. Gonchar, A.V. Chechkin

#### **PF17**

# DIFFUSION MECHANISM OF ALPHA DECAY, SPONTANEOUS FISSION, CLUSTER AND PROTON RADIOACTIVITY V.D. Rusov, S.Cht. Mavrodiev, <u>D. Vlasenko</u>, M.A. Deliyergiyev

#### PF18

"QUANTUM" CHAOS AND STABILITY CONDITION OF SOLITON-LIKE WAVES OF NUCLEAR BURNING IN NEUTRON-MULTIPLICATING MEDIA V.D. Rusov, E.P. Linnik, V.A. Tarasov, T.N. Zelentsova, I.V. Sharf, S.A. Chernezhenko, O.A. Byegunova, P.A. Molchynikolov

# Friday, September 02, 2011

# Plenary Session (Large Hall, KIPT)

### Chairman K.Ispiryan

9-00 - 9-30	ELECTRIC RESPONSE IN HE II UNDER EXCITATION OF
PLE5	SECOND SOUND WAVES
	A.S. Rybalko, V.A. Tikhiy, A.S. Neoneta, and K.R. Zhekoy

- 9-30 10-00 EFFECTS IN THE LINEAR RESPONSE OF ATOMIC BOSE-PLE6 EINSTEIN CONDENSATES TO AN EXTERNAL ELECTROMAGNETIC PERTURBATION Yu.V. Slyusarenko and A.G. Sotnikov
- 10-00 10-30 AHARONOV-BOHM EFFECT IN SCATTERING OF HIGH-PLB5 ENERGY PARTICLES Yu.A. Sitenko
- 10-30 11-00 GRAPHENE AND QUNTUM ELECTRODYNAMICS PLA3 V.P. Gusynin
- 11-00 11-20 Coffee Break

#### Chairman E.Tomasi-Gustafsson

11-20 - 11-40ANGULAR DISTRIBUTION AND ASYMMETRIES IN<br/>FLAVOR-CHANGING NEUTRAL-CURRENT DECAY<br/> $B \rightarrow K^{*1^+1^-}$ <br/>A.Yu. Korchin, V.A. Kovalchuk, and D.O. Lazarenko

- 11-40 12-00 2D ISING-HEISENBERG MODEL WITH QUARTIC PLE7 INTERACTION J.S. Valverde
- 12-00 12-20 GEOMETRIZATION OF INTERACTION PLA4 B.I. Lev
- 12-20 12-40 CAUSAL QUANTUM MECHANICS AND SOLVING THE PLA2 PROBLEM OF Ψ-WAVE REDUCTION P.I. Fomin
- 12-40 14-00 Farewell Coffee

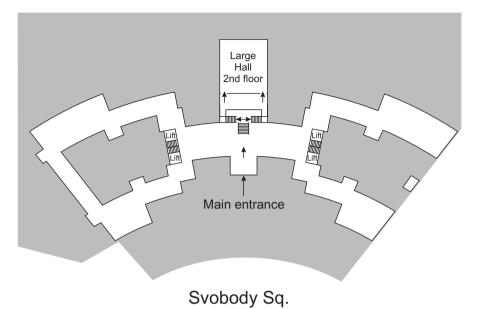


Fig. 1. Plan of the KNU building. Large Hall

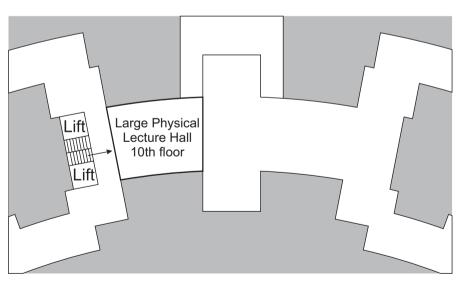


Fig. 2. Plan of the KNU building. Large Physical Lecture Hall

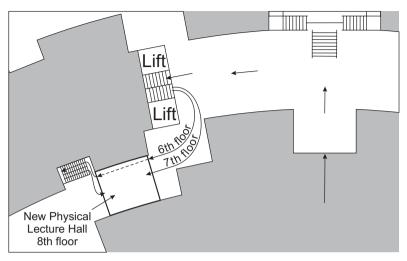


Fig. 3. Plan of the KNU building. New Physical Sinelnikov Lecture Hall

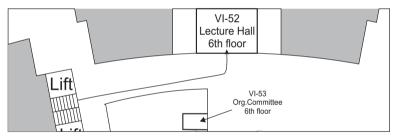


Fig. 4. Plan of the KNU building. VI-52 Tarapov Lecture Hall

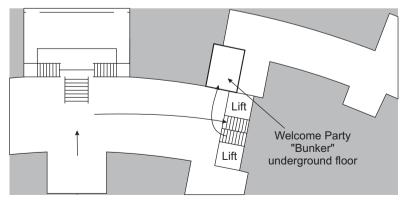


Fig. 5. Plan of the KNU building. "Bunker"