LX International Conference on Nuclear Physics "Nucleus 2010. Methods of Nuclear Physics for Femto- and Nanotechnologies"

PRELIMINARY PROGRAMME

July 6, Tuesday, 9:00
Plenary session I

P. Ring.
COVARIANT DENSITY FUNCTIONALS WITH SPECTROSCOPIC PROPERTIES AND QUANTUM PHASE TRANSITIONS IN FINITE NUCLEI. – 30 *min*.

V.I. Kukulin.
DI- AND MULTIBARYON QUARK CLUSTERS IN NUCLEI. – 30 *min*.

J.C. Hardy.
TESTING CVC AND CKM UNITARITY VIA SUPERALLOWED NUCLEAR BETA DECAY. – 30 *min*.

Yu.E. Penionzhkevich.
PECULARITIES OF NUCLEAR REACTIONS INDUCED BY ^{6}He, ^{6,8,9,11}Li NUCLEI NEAR COULOMB BARRIER ENERGY. – 30 *min*.

X. Viñas.
DENSITY DEPENDENCE OF THE SYMMETRY ENERGY AND NEUTRON SKIN THICKNESS FROM ANTIPROTONIC ATOMS. – 30 *min*.

P. Van Isacker.
PARTIAL CONSERVATION OF SENIORITY IN NUCLEI. – 30 *min*.

C. Spitaleri.
THE TROJAN HORSE METHOD FOR NUCLEAR ASTROPHYSICS: NEW RESULTS. - 30 *min*.

A.A. Ogloblin.
OBSERVATION OF NEUTRON HALOS IN THE EXCITED STATES OF NUCLEI. - 30 *min*.

July 6, Tuesday, 15:00

Section 1

Experimental study of nuclear properties and fundamental interactions

Joint talk:

SEARCH FOR NUCLEAR STABLE MULTINEUTRONS IN THE REACTIONS WITH TRANSFER OF LARGE NUMBER OF NEUTRONS TO ^{19}F AND ^{208}Pb.

POSSIBLE OBSERVATION OF STABLE MULTINEUTRONS IN THE URANIUM FISSION WITH ^{25}Mg ACTIVATION.

Reporter *B.G. Novatsky* – 15 *min.*

Y.L. Parfenova.

STUDY OF ^{7}He LOW ENERGY SPECTRUM USING ANGULAR CORRELATIONS. - 15 *min*.

A.N. Danilov.

SEARCH FOR ANALOGS OF HOYLE STATE IN HIGH-LYING STATES OF ^{12}C, ^{13}C. - 15 *min*.

B.A. Chernyshev.

SPECTROSCOPY OF THE ^{10}Li ISOTOPE BY THE STOPPED PION ABSORPTION REACTIONS ON THE RADIOACTIVE TARGET ^{14}C. - 15 *min*.

Joint talk:

THE STUDY OF SHELL STRUCTURE OF EVEN-EVEN Ni ISOTOPES WITH N FROM 20 TO 40.

THE EVALUATION AND ANALYSIS OF NEUTRON SINGLE-PARTICLE ENERGIES IN ^{78}Ni NUCLEI.

Reporter *O.V. Bespalova* – 15 *min.*

Joint talk:

A DETAILED EXPERIMENTAL INVESTIGATION OF THE 22.5 keV M1+E2 NUCLEAR TRANSITION IN ^{149}Sm BY MEANS THE CONVERSION ELECTRON SPECTROSCOPY.

EXPERIMENTAL INVESTIGATION OF A LIGAND EFFECT ON THE CONVERSION ELECTRON SPECTRUM OF THE 22.5 keV NUCLEAR TRANSITION IN ^{149}Sm FROM THE ^{149}Eu EC DECAY.

THE L1-3, M1-3, AND N1,3 ATOMIC LEVEL WIDTHS OF Sm DETERMINED FROM CONVERSION ELECTRON SPECTRA.

Reporter *A.Kh. Inoyatov* – 15 *min.*

V.I. Stegailov.
LEVELS OF ^{160}Ho EXCITED IN THE DECAY OF ^{160}Er AND ^{160m}Ho (3.2 s) . – 15 *min*.

Joint talk:
SEARCHING FOR INFLUENCE OF THE "ATOMIC STRUCTURE EFFECT" ON THE KLL AND LMM AUGER TRANSITION ENERGIES OF Gd.
NEW EXPERIMENTAL DATA ON "ATOMIC STRUCTURE EFFECT" ON THE KLL AND L3MM AUGER TRANSITION ENERGIES.
THE FIRST OBSERVATION OF THE FULL STRUCTURE OF THE KLL AUGER SPECTRUM OF Sm (GENERATED IN THE EC DECAY OF ^{149}Eu).
Reporter *A.Kh. Inoyatov* – 15 *min.*

O.K. Egorov.
OBSERVATION E0 TRANSITION IN Dy-160 WITH ENERGY K703.0 KeV. - 15 *min*.

July 6, Tuesday, 15:00
Section 2
Experimental study of nuclear reactions

N. Burtebayev.
NEW SYSTEMATICS OF OPTICAL MODEL POTENTIAL PARAMETERS FOR THE p, d, ^{3}He AND α-SCATTERING ON ^{6,7}Li AND ^{10,11}B NUCLEI. - 15 *min*.

T.K. Zholdybayev.
INCLUSIVE SPECTRA OF (p,xp) REACTION ON ^{27}Al AT ENERGY E_p= 29.9 MeV. - 15 *min*.

S.P. Avdeyev.
TIME-SPACE PROPERTIES FOR p+Au COLLISIONS AT 2.1 GeV. - 15 *min*.

A.B. Balabekyan.
SYSTEMATIZATION OF CROSS-SECTIONS OF RESIDUAL NUCLEI FORMATION ON THE SEPARATED TIN ISOTOPES IN REACTIONS WITH PROTONS OF DIFFERENT ENERGIES. – 15 *min*.

V. Bondar.
MEASUREMENT AND ANALYSIS OF (n,xγ) CROSS SECTIONS FOR

INTERACTION OF FAST NEUTRONS WITH MEDIUM AND HEAVY NUCLEI. - 15 *min*.

A.N. Vodin.
INFLUENCE OF THE ISOSPIN ON THE (p,γ)-REACTION RATES ON 2s1d-SHELL NUCLEI. - 15 *min*.

O.O. Beliuskina.
QUASI-FREE INCLUSIVE PROCESSES FOR TWO-PARTICLE SPLITTING OF TRITONS BY DEUTERONS WITH ENERGY OF 37 MeV. - 15 *min*.

S.B. Sakuta.
COUPLED CHANNELS EFFECTS AND ROLE OF EXCHANGE MECHANISM IN THE ^{6}Li + D ELASTIC BACKWARD SCATTERING. - 15 *min*.

Yu.N. Pavlenko.
DEUTERON ELASTIC SCATTERING ON ^{58}Ni, ^{124}Sn AND ^{208}Pb NUCLEI AT SUB-BARRIER ENERGIES. - 15 *min*.

O. Povoroznyk.
EXCITATION SPECTRUM OF ^{4}He. - 15 *min*.

N.S. Zelenskaya.
ANGULAR ALPHA-GAMMA CORRELATIONS IN INELASTIC ALPHA SCATTERING ON ^{24}Mg AT 30.3 MeV. - 15 *min*.

L.I. Galanina.
INVESTIGATION OF ALPHA SCATTERING ON ^{28}Si AT 30.3 MeV. - 15 *min*.

July 6, Tuesday, 15:00
Section 3
The theory of atomic nucleus and fundamental interactions

V.O. Eremenko.
CALCULATIONS OF CHARACTERISTICS OF NEUTRON-DEUTERON AND PROTON-DEUTERON SYSTEMS WITHIN THE TWO-BODY POTENTIAL MODEL. - 15 *min*.

L.D. Blokhintsev.
EXCHANGE MECHANISM OF DEUTERON-ALPHA INTERACTION AND VERTEX CONSTANTS OF ^{6}Li. - 15 *min*.

Yu.V. Orlov.
VERTEX CONSTANTS FOR ^{7}Be$\rightarrow^{3}$He+^{4}He FROM PHASE SHIFT ANALYSIS IN EFFECTIVE-RANGE THEORY. - 15 *min*.

G. Musulmanbekov.
SPACIAL STRUCTURE OF LIGHT NUCLEI. - 15 *min*.

A.M. Shirokov.
LIGHT NUCLEI IN AB INITIO APPROACH WITH REALISTIC INVERSE SCATTERING NN-INTERACTION. - 15 *min*.

A.P. Severyukhin.
CHARGE-EXCHANGE EXCITATIONS AND A SEPARABLE APPROXIMATION FOR SKYRME INTERACTIONS. - 15 *min*.

I.A. Gnilozub.
DENSE SPECTRA OF ALPLHA-PARTICLE STATES OF NUCLEI IN THE GENERALIZED ELLIOTT MODEL. - 15 *min*.

I.N. Boboshin.
EVOLUTION OF SHELL STRUCTURE AND NEW MAGIC NUMBERS IN NUCLEI Z = 20 - 50. - 15 *min*.

V.V. Samarin.
MODIFIED SHELL MODEL OF ATOMIC NUCLEI. - 15 *min*.

A.V. Unzhakova.
TEN-DIMENSIONAL SHELL CORRECTION CALCULATIONS OF CCT IN ^{234}U. - 15 *min*.

I.V. Ushakov.
M1 TRANSITIONS BETWEEN BOUND STATES IN ^{23}Na WITH DIFFERENT DEFORMATIONS. - 15 *min*.

V.P. Garistov.
SIMPLIFIED DESCRIPTION OF THE YRAST LINES IN EVEN-EVEN DEFORMED NUCLEI. - 15 *min*.

J. Proskurins.
STUDY OF THE ONSET OF CHAOS IN THE A~190 NUCLEAR DEFORMATION PHASE TRANSITION REGION. - 15 *min*.

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Section 4
Nuclear reaction theory

A.V. Glushkov.
RESONANCE PHENOMENA IN HEAVY NUCLEI COLLISIONS AND STRUCTURIZATION OF POSITRON SPECTRUM. . – 15 *min*.

L.D. Blokhintsev.
MANY-CHANNEL EFFECTIVE RANGE EXPANSION AND BOUND-STATE PROPERTIES. – 15 *min*.

E.S. Konobeevski.
DETERMINATION OF NEUTRON-NEUTRON SCATTERING LENGTH AND INTERACTION POTENTIALS FROM THE nd BREAKUP REACTION: EXPERIMENTAL AND THEORETICAL ASPECTS. - 15 *min*.

V.L. Lyuboshitz.
SIGN OF THE SINGLET LENGTH OF (np)-SCATTERING, NEUTRON RADIATIVE CAPTURE BY THE PROTON AND PROBLEM OF THE VIRTUAL LEVEL OF THE (np) SYSTEM. - 15 *min*.

Joint talk:
SPIN OBSERVABLES IN PROTON-INDUCED DEUTERON BREAKUP WITHIN THE REFINED GLAUBER MODEL.
RECONSTRUCTION OF Nn AND Np HELICITY AMPLITUDES FROM Nd EXPERIMENTAL DATA AT INTERMEDIATE ENERGIES.
Reporter *M.N. Platonova* – 15 *min.*

Joint talk:
FORWARD-ANGLE POLARIZATION TRANSFER COEFFICIENTS D_{ii} IN THE $^{12}C(p,p')$ REACTION AT E_P = 200 MeV FOR THE ISOSCALAR 1^+ STATE AND NUCLEON-NUCLEUS KINEMATICS.
THE APPLICATION OF THE PROGRAM LEA FOR THE SPIN-TRANSFER OBSERVABLES D_{NN}, D_{SS}, AND D_{LL} IN SCATTERING FROM ^{12}C AND ^{28}Si TO THE 1^+ (T=0 AND T=1) STATES AT AVERAGED ENERGIES NEAR 400 MeV.
TESTING SHORT-RANGE CONTRIBUTIONS OF THE TENSOR PART OF

NN EFFECTIVE INTERACTION IN DESCRIPTION OF THE SPIN-TRANSFER OBSERVABLES D_{NN}, D_{SS}, AND D_{LL} IN SCATTERING FROM THE 1^+ (T=0) STATE IN ^{12}C AT FORWARD ANGLES.
Reporter *M.S. Onegin* – 15 *min.*

B.F. Irgaziev.
EXTRACTION OF COMPLEX ENERGY OF BROAD RESONANCES BY S MATRIX POLE METHOD. - 15 *min*.

Joint talk:
INTERFERENCE EFFECTS IN SINGLE SCATTERING OF PROTONS AT ^{15}C, ^{15}N NUCLEI IN THE DIFFRACTION THEORY.
STRUCTURE OF LIGHT NEUTRON-RICH NUCLEI AND MECHANISM OF PROTONS ELASTIC SCATTERING.
Reporter *Ye.T. Ibrayeva* – 15 *min.*

V.V. Pilipenko.
ANALYSIS OF NUCLEAR STRUCTURE AND CROSS SECTIONS AND POLARIZATIONS IN N-A SCATTERING USING SKYRME FORCES. - 15 *min*.

N.G. Chechenin.
COMPARISON OF EXPERIMENTAL DATA AND DIFFERENT MODEL PREDICTIONS IN FRAGMENTATION OF Si AND Al UNDER IMPACT OF COSMIC HIGH ENERGY PROTONS. – 15 *min*.

A.V. Sinyakov.
ASTROPHYSICAL S-FACTOR OF THE RADIATION CAPTURE REACTIONS IN THE ORTHOGONALITY CONDITIONS MODEL. – 15 *min*.

July 6, Tuesday, 15:00
Section 5
Experimental techniques and their applications

S. Litvinov.
THE FUTURE STORAGE RING COMPLEX AT FAIR. – 15 *min*.

K.N. Gusev.
THE GERDA EXPERIMENT. – 15 *min*.

M. La Cognata.
THE TROJAN HORSE METHOD AS A TOOL TO INVESTIGATE

LOW-ENERGY RESONANCES: THE $^{18}O(p,\alpha)^{15}N$ AND $^{17}O(p,\alpha)^{14}N$ CASES. - 15 *min*.

O.A. Ivanova.
THE EFFECT OF MAGNETIC FIELDS OF DIFFICULT CONFIGURATIONS ON POPULATION OF SPIN STATES OF THE RADICAL PAIRS. – 15 *min*.

A.V. Daniel.
METHODS OF TRIPLE COINCIDENCES GAMMA RAYS ANALYSIS. - 15 *min*.

Yu.S. Lutostansky.
CONCEPTION OF THE POWERFUL ANTINEUTRINO SOURCE. – 15 *min*.

L.N. Latysheva.
OPTIMIZATION OF THE SHIELDING/COLLIMATOR CONFIGURATION OF THE INR RAS NEUTRON GENERATOR. – 15 *min*.

V. Eremin.
DEVELOPMENT OF SILICON DOUBLE-SIDED STRIP DETECTORS FOR ION SPECTROSCOPY AND TRACKING AT EXL EXPERIMENT OF FAIR PROGRAM AT GSI. - 15 *min*.

E. Verbitskaya.
SILICON EDGELESS DETECTORS FOR TOTAL pp CROSS SECTION MEASURENETS AT LHC. – 15 *min*.

V.V. Samedov.
RELATIONSHIP BETWEEN SENSOR SIGNALS' CORRELATION AND INTERNAL RESOLUTION OF A STRIP DETECTOR. – 15 *min*.

Yu.B. Gurov.
DETERMINATION OF THE THICKNESS OF SILICON ΔE-DETECTORS. - 15 *min*.

O.V. Zeynalova.
TWIN POSITION SENSITIVE IONIZATION CHAMBER, UTILIZING BACKGAMMON AND TIME PROJECTION METHOD. – 15 *min*.

July 7, Wednesday, 9:00
Semiplenary session I

S.G. Kadmensky.
THE INTERFERENCE OF NEUTRON RESONANCE FISSION AMPLITUDES AND T-ODD ASYMMETRIES FOR DIFFERENT PRESCISSION THIRD PARTICLES IN TERNARY FISSION OF NUCLEI. - 20 *min*.

V.E. Bunakov.
QUASI-CLASSICAL INTERPRETATION OF THE TRI - ASYMMETRY IN TERNARY FISSION. – 20 *min*.

E.E. Saperstein.
ON LIMITS OF AB INITIO CALCULATIONS OF PAIRING GAP IN NUCLEI. – 20 *min*.

V.A. Rubchenya.
FORMATION OF THE EXTREME NEUTRON-RICH NUCLEI IN THE NUCLEAR FISSION. – 20 *min*.

Joint talk:
INVESTIGATION OF NEUTRON STABILITY OF NEUTRON-RICH EVEN-EVEN ISOTOPES O, S, Ar, Kr, Rn.
PENINSULAS OF NEUTRON STABILITY IN THE NEIGHBORHOOD OF NEUTRON MAGIC NUMBERS.
Reporter *V.N. Tarasov* – 20 *min.*

V.Z. Goldberg.
STRUCTURE OF LIGHT EXOTIC NUCLEI, AND RESONANCE SCATTERING USING RARE BEAMS. - 20 *min*.

W. Greiner.
THE EXTENSION OF MENDELEEV PERIODIC SYSTEM. - 20 *min*.

A.S. Botvina.
STATISTICAL APPROACH FOR SUPERNOVA MATTER AND NUCLEAR MULTIFRAGMENTATION. - 20 *min*.

Y.A. Litvinov.
NUCLEAR PHYSICS EXPERIMENTS AT STORAGE RINGS. – 20 *min*.

J. Speth.
COHERENT STRUCTURES IN NUCLEAR PHYSICS AND IN FINANCIAL MARKETS. - 20 *min*.

S.A. Karamian.
ESTIMATE OF FISSION TIME-SCALE IN MULTIPLE INITIATION MODEL. – 20 *min*.

July 7, Wednesday, 9:00
Semiplenary session II

M. Brenner.
FROM VIBRONS AND SOLITONS TO VORTEX STRUCTURE. – 20 *min*.

S.P. Kamerdzhiev.
CALCULATION METHODS FOR STATIC MOMENTS OF EXCITED STATES AND TRANSITIONS BETWEEN EXCITED STATES IN EVEN-EVEN NUCLEI. – 20 *min*.

I. Ragnarsson.
COEXISTENCE BETWEEN NEAR-PROLATE AND NEAR-OBLATE SHAPES FOR ALL SPINS, I~0-30, IN ^{76}Rb. – 20 *min*.

N.I. Tarantin.
NEW MANIFESTATION OF RESIDUAL NEUTRON-PROTON INTERACTION AND NUCLEAR SHELLS IN LIHGT NUCLEI. – 20 *min*.

A.A. Pasternak.
LIFETIMES AND TRANSITION PROBABILITIES IN THE POSITIVE PARITY STATES BAND IN ^{194}Tl. – 20 *min*.

E.A. Yakushev.
RESULTS OF DIRECT SEARCH OF WIMPS IN EDELWEISS-II EXPERIMENT. - 20 *min*.

D. Melconian.
PRECISION BETA-DECAY STUDIES USING NEUTRAL ATOM TRAPS. - 20 *min*.

R. Engels.
EXTRA PHYSICS WITH A POLARIZED ATOMIC BEAM SOURCE AND A LAMB-SHIFT POLARIMETER. – 20 *min*.

I. Lombardo.
ISOSPIN EFFECTS OBSERVED IN NUCLEAR REACTIONS AT 25 MeV/NUCLEON. - 20 *min*.

G.M. Gurevich.
DOUBLE POLARIZATION EXPERIMENTS AT THE REAL PHOTON BEAM OF MAMI-C ACCELERATOR. - 20 *min*.

V.S. Alexandrov.
NUCLEAR TRANSITIONS AND STABILIZATION OF LASER FREQUENCY. - 20 *min*.

July 7, Wednesday, 15:00
Section 1
Experimental study of nuclear properties and fundamental interactions

V.V. Dyachkov.
STUDY FRESNEL PHASE SHIFTS IN THE DIFFERENTIAL CROSS SECTIONS AND THEIR RELATIONSHIP WITH THE SHAPE OF THE NUCLEI. - 15 *min*.

G.M. Gurevich.
ANGULAR DISTRIBUTIONS OF ALPHA PARTICLES EMITTED BY ORIENTED NUCLEI AND THEIR RELATION TO NUCLEAR DEFORMATION. - 15 *min*.

I.N. Izosimov.
FINE STRUCTURE OF THE β+/EC - DECAY STRENGTH FUNCTIONS OF SPHERICAL (^{147g}Tb), DEFORMED (^{160g}Ho) AND ISOMERIC (^{160m}Ho) NUCLEI. - 15 *min*.

A.V. Lubashevskiy.
PRECISION MEASUREMENTS OF ^{210}Bi BETA SPECTRUM WITH EDELWEISS. - 15 *min*.

S.V. Rozov.
NEUTRON FLUX IN EDELWEISS-II EXPERIMENT. - 15 *min*.

F.F. Karpeshin.
FLUORESCENCE INDUCED BY DOUBLE ELECTRON K CAPTURE. - 15 *min*.

S.S. Ratkevich.
INVESTIGATION OF THE 2K-CAPTURE IN Kr-78 WITH LARGE-VOLUME PROPORTIONAL COUNTER. - 15 *min*.

N.I. Rukhadze.
SEARCH FOR DOUBLE BETA DECAY OF ^{106}Cd. - 15 *min*.

D.V. Medvedev.
EXPERIMENT GEMMA: SEARCH FOR THE NEUTRINO MAGNETIC MOMENT. - 15 *min*.

July 7, Wednesday, 15:00
Section 2
Experimental study of nuclear reactions

T.V. Chuvilskaya.
PHYSICS OF HIGH-SPIN ISOMERIC STATES IN NUCLEAR REACTIONS INDUCED BY He ISOTOPES. - 15 *min*.

Joint talk:
MECHANISM OF ^{7}Li(^{18}O, ^{16,17}N)^{9,8}Be REACTIONS AND ^{16}N + ^{9}Be, ^{17}N + ^{8}Be OPTICAL POTENTIALS.
ELASTIC AND INELASTIC SCATTERING OF ^{12,13,14}C + ^{18}O VERSUS ^{12,13,14}C + ^{16}O.
Reporter *A.T. Rudchik* – 15 *min.*

H. Simon.
CORRELATIONS IN LIGHT EXOTIC SYSTEMS AT RELATIVISTIC ENERGIES. - 15 *min*.

D.B. Gin.
DOPPLER BROADENED γ-LINESHAPE IN REACTION ^{9}Be(α,nγ)^{12}C AT TEMPERATURES T_{α}< 0.6 MeV IN PLASMA. - 15 *min*.

A.P. Krutenkova.
FRAGMENTATION OF CARBON IONS AT TWA ITEP. - 15 *min*.

Yu.A. Gloukhov.
THE INELASTIC $^{16}O+^{12}C$ SCATTERING AT E_{LAB}= 170-280 MEV. - 15 *min*.

Joint talk:
PHI-MESON PRODUCTION IN COPPER NUCLEI COLLISIONS AT 200 GeV IN PHENIX EXPERIMENT.
PHI-MESON PRODUCTION IN HEAVY ION COLLISIONS AT 62.4 GeV IN PHENIX EXPERIMENT.
Reporter *D.O. Kotov* – 15 *min.*

D.A. Ivanishchev.
RECENT RESULTS ON INTERMEDIATE AND HIGH-P_T PRODUCTION OF LIGHT HADRONS IN RELATIVISTIC HEAVY ION COLLISIONS AT RHIC. - 15 *min*.

E.L. Isupov.
ELECTROPRODUCTION OF π^+ π^- PAIRS OFF PROTONS AT HIGH PHOTON VIRTUALITIES. - 15 *min*.

A.A. Turinge.
PARTIAL MESON PHOTOPRODUCTION CROSS SECTIONS AT 600-1500 MeV. - 15 *min*.

Joint talk:
ISOMER RATIOS FOR PRODUCTS OF PHOTONUCLEAR REACTIONS WITH MIDDLE-WEIGHT NUCLEI.
ISOMER RATIOS FOR YTTRIUM AS PRODUCT OF REACTIONS (γ, 2np), (γ, 3np), (γ, 4np) ON ^{90}Zr AND ^{91}Zr TARGET NUCLEI WITH BREMSSTRAHLUNG MAXIMUM ENERGY 90 MeV.
Reporter *O.A. Kovalenko* – 15 *min.*

V.V. Varlamov.
PARTIAL PHOTONEUTRON REACTION CROSS SECTIONS WITHOUT EXPERIMENTAL NEUTRON MULTIPLICITY SORTING METHODS SHORTCOMINGS. - 15 *min*.

S.N. Olejnik.
DEVELOPMENT OF METHODS FOR MEASURING THE CROSS SECTIONS OF PHOTO-NUCLEAR REACTIONS ON ELECTRON BEAM ACCELERATOR LEA-40 OF NSC KIPT. - 15 *min*.

K.A. Stopani.
PHOTONUCLEAR REACTIONS YIELDS ON PALLADIUM

ISOTOPES. - 15 *min*.

July 7, Wednesday, 15:00
Section 3
The theory of atomic nucleus and fundamental interactions

Joint talk:
NUCLEONIC FOUNDATIONS OF THE INTERACTING BOSON MODEL AND THE STRUCTURE OF THE VIBRATIONAL NUCLEI.
MICROSCOPIC DESCRIPTION FOR γ–UNSTABLE NUCLEI BY THE INTERACTING BOSON MODEL.
Reporter *K. Baktybayev* – 15 *min.*

A.D. Efimov.
IBM1 ANALYSIS OF COLLECTIVE STATES IN ^{238}Pu, ^{234}U, ^{230}Th, ^{226}Ra AND HINDRANCE FACTORS FOR α – BRANCHES TO FIRST EXCITED 0^+ STATES. - 15 *min*.

Joint talk:
EXCITED STATES OF ^{107}Ag AND ^{109}Ag.
BETA-DECAY ^{109}Cd ^{109}Ag.
Reporter *A.A. Kurteva* – 15 *min.*

N.N. Arsenyev.
STRUCTURE OF LOW-LYING QUADRUPOLE STATES IN NUCLEI NEAR ^{132}Sn. - 15 *min*.

V.A. Plujko.
NUCLEAR LEVEL DENSITY WITHIN CLOSED-FORM METHODS. - 15 *min*.

E.E. Lin.
ASYMPTOTICAL MODEL OF CLUSTERS FORMATION IN NUCLEAR MATTER. - 15 *min*.

A.K. Vlasnikov.
GREEN FUNCTION FOR FINITE FERMI SYSTEMS WITH A FIXED PARTICLE NUMBER AND STRONG PAIRING. - 15 *min*.

S.V. Tolokonnikov.
ON SELFCONSISTENT CALCULATIONS OF NUCLEAR RADII. - 15 *min*.

A. Avdeenkov.
ON COLLECTIVITY OF THE LOW-LYING(PYGMY) DIPOLE RESONANCE. - 15 *min*.

V.I. Tselyaev.
ENERGY-WEIGHTED SUM RULE FOR MAGNETIC EXCITATIONS IN THE RPA. - 15 *min*.

M.L. Gorelik.
"COULOMB" DESCRIPTION OF THE MAIN RELAXATION PARAMETERS FOR THE ISOBARIC ANALOG AND CHARGE-EXCHANGE GIANT MONOPOLE RESONANCES. - 15 *min*.

S.Yu. Igashov.
ON GAMOW-TELLER STRENGTH DISTRIBUTIONS FOR ββ-DECAING NUCLEI WITHIN THE CONTINUUM-QRPA. - 15 *min*.

U.A. Skorodumina.
MICROSCOPICAL DESCRIPTION OF E1 RESONANCE IN Ca-48. - 15 *min*.

Joint talk:
BETA-STABILITY OF HEAVY AND SUPERHEAVY NUCLEI.
ALFA – DECAY AND STABILITY OF HEAVY AND SUPERHEAVY NUCLEI.
NUCLEAR SHELLS AND THE STRUCTURE OF THE ENERGY SURFACE OF HEAVY ELEMENTS.
THE OPTIMAL MASS FORMULA AND BINDING ENERGIES OF HEAVY NUCLEI.
Reporter *N.N. Kolesnikov* – 15 *min.*

A.S. Nikitin.
INERTIA MOMENT FOR THE QUANTUM HARMONIC OSCILLATOR. - 15 *min*.

A.A. Khamzin.
DYNAMIC OF THE SYSTEM OF NUCLEAR SPINS WITH IDENTICAL CONSTANTS OF SPIN-SPIN INTERACTIONS. - 15 *min*.

July 7, Wednesday, 15:00

Section 4

Nuclear reaction theory

T.L. Belyaeva.
^{8}Be DIRECT TRANSFER IN α + ^{12}C INELASTIC SCATTERING TO THE NEAR-3α - THRESHOLD STATES IN ^{12}C. - 15 *min*.

K.V. Lukyanov.
THEORETICAL STUDY OF ^{6}He + ^{12}C ELASTIC SCATTERING USING A MICROSCOPIC OPTICAL POTENTIAL. - 15 *min*.

V.A. Sergeev.
ABSORPTION EFFECTS IN THE NUCLEON- OR CORE-STRIPPING REACTIONS INDUCED BY THE HALO NUCLEUS. - 15 *min*.

N.A. Maltsev.
THE THEORETICAL DESCRIPTION OF THE REACTION ^{16}O+^{12}C И ^{16}O+^{16}O IN WIDE RANGE ENERGIES. - 15 *min*.

S.Yu. Igashov.
FORBIDDEN STATES IN HEAVY-ION INTERACTION. - 15 *min*.

T.I. Mikhailova.
DISSIPATIVE PROCESSES IN ^{18}O-INDUCED PERIPHERAL COLLISIONS AT FERMI ENERGIES. - 15 *min*.

V.V. Samarin.
TRANSFER REACTION MECHANISM AT LOW-ENERGY COLLISIONS WITH NEUTRONS-ENRICHED NUCLEI. - 15 *min*.

V.V. Samarin.
NUCLEONS TWO-CENTER LEVELS IN PERTURBED STATIONARY STATES METHOD FOR HEAVY ION FUSION REACTIONS. - 15 *min*.

Joint talk:
THE LOW ENERGY PHOTOEMISSION REACTIONS ON LIGHT NUCLEI IN DYNAMIC CLUSTER MODELS.
THE CLUSTER ANALOGY IN FRAGMENTATION CHANNELS ON ^{7}Li AND ^{9}Be NUCLEI.
Reporter *N.A. Burkova* – 15 *min.*

B.A. Tulupov.
ON SEMIMICROSCOPIC DESCRIPTION OF SIMPLEST PHOTONUCLEAR REACTIONS WITH EXCITATION OF THE ISOVECTOR GIANT DIPOLE AND QUADRUPOLE RESONANCES. - 15 *min*.

July 7, Wednesday, 15:00
Section 5
Experimental techniques and their applications

L. Kroell.
A VECTOR AND TENSOR POLARIMETER FOR DEUTERONS AT FUSION ENERGIES.

Joint talk:
CRYOGENIC TPC FOR THE MuSun EXPERIMENT.
INVESTIGATION OF THE NUCLEAR POLARIZATION IN MOLECULAR HYDROGEN AND DEUTERIUM PRODUCED FROM THE POLARIZED ATOMS.
DOUBLE POLARIZED dd-FUSION.
Reporter *P. Kravtsov* – 15 *min.*

S.M. Taova.
CENTER OF NUCLEAR PHYSICAL DATA IN VNIIEF. - 15 *min*.

Joint talk:
THE ENSDF_TOOLBOX PROGRAM PACKAGE.
THE SPECIALIZED EDITOR FOR THE ENSDF FORMAT FILES.
Reporter *A.A. Rodionov* – 15 *min.*

S.L. Sakharov.
ЗАКОН НЬЮКОМА-БЕНФОРДА И РАСПРЕДЕЛЕНИЕ ЭКСПЕРИМЕНТАЛЬНЫХ ОШИБОК ФИЗИЧЕСКИХ ВЕЛИЧИН. - 15 *min*.

Joint talk:
APPLICATION OF FAST DIGITAL SHAPE ANALYSIS FOR INVESTIGATION AMPLITUDE-TEMPORAL PROPERTIES OF INORGANIC SCINTILLATORS: YAP, BGO, CsI, BaF_2.
INVESTIGATION OF THE HIGH ENERGY GAMMA-RAY EMISSION ACCOMPANYING SPONTANEOUS FISSION OF THE ^{252}Cf NUCLEUS.
Reporter *S.S. Markochev* – 15 *min.*

S.S. Semikh.
GEANT4 SIMULATION OF THE PLATEAU DE BURE NEUTRON MONITOR RESPONSE FUNCTIONS. - 15 *min*.

M.N. Levin.
METHOD FOR PREDICTION OF THE RADIATION STABILITY OF MOS-TRANSISTORS. - 15 *min*.

P.V. Lukin.
RADIATION PROCESSES AT PROTON PASSAGE THROUGH HETEROGENEOUS DIELECTRIC. - 15 *min*.

Joint talk:
CALCULATION OF CHANNELING THE COMPOUND ATOMIC PARTICLES IN CARBON NANOTUBES.
HYDROGEN ATOM STATE EVOLUTION IN NANOTUBE.
Reporter *G.M. Filippov* – 15 *min.*

P.N. Zhukova.
NEW ENERGY DISPERSIVE METHODS OF X-RAY DIAGNOSTICS OF MOSAIC CRYSTALS AND NANOMATERIALS. - 15 *min*.

N.P. Dikiy.
THE USE OF POSITRON ANNIHILATION FOR STUDY OF ZINC RECRYSTALLIZATION. - 15 *min*.

N.P. Dikiy.
THE STUDY RADIONUCLIDE LEACHING FROM TUFF AND CLINOPTILOLITE BY MEANS OF ACCELERATOR BASE TECHNIQUE. - 15 *min*.

M.V. Zheltonozhska.
RESEARCH OF RADIONUCLIDES CONCENTRATION IN FUEL CONTAINING MATERIALS FROM 4^{th} UNIT OF CHNPP AND CHERNOBYL EXCLUSION ZONE. - 15 *min*.

July 8, Thursday, 9:00

Section 2

Experimental study of nuclear reactions

Joint talk:

ISOMERIC YIELD RATIOS IN (γ,n) REACTIONS ON ^{116}Cd IN THE GIANT DIPOLE RESONANCE ENERGY REGION.

INVESTIGATION OF THE ISOMERIC YIELD RATIOS ENERGY DEPENDENCE FOR THE ^{119}Te AND ^{129}Te ISOTOPES IN THE PHOTONEUTRON REACTIONS.

Reporter *D.M. Symochko* – 15 *min.*

Yu.P. Cherdantsev.

NUCLEAR REACTION IN METAL – DEUTERIUM SYSTEMS STIMULATED BY IONIZING RADIATION. - 15 *min*.

S.A. Karamian.

ISOMER TRANSMUTATION IN ELECTRON-ASSISTED PROCESSES. - 15 *min*.

M.K. Suleymanov.

APPLYING THE RANDOM MATRIX APPROACH TO PROCESS THE NUCLEAR PHYSICS DATA. - 15 *min*.

A.S. Ignatov.

EXPERIMENTAL STUDY ON INTERACTION OF ETA-MESONS WITH CARBON NUCLEI. - 15 *min*.

Yu.A. Chestnov.

ANGULAR SEPARATION OF PION- AND QUASI-ELASTIC-MODES OF THE SINGLE-STAGE NUCLEAR FISSION. - 15 *min*.

A.V. Fomichev.

FISSION CROSS SECTIONS OF HEAVY NUCLEI MEASURED IN THE ENERGY RANGE OF FAST AND INTERMEDIATE ENERGY NEUTRONS. - 15 *min*.

July 8, Thursday, 9:00

Section 3

The theory of atomic nucleus and fundamental interactions

Yu.V. Pyatkov.
LIGHT CHARGE PARTICLE ACCOMPANIED COLLINEAR CLUSTER TRI-PARTITION. - 15 *min*.

F.F. Karpeshin.
THE MUON CAPTURE IN ^{16}O: THE ANGULAR AND POLARISATION CORRELATIONS. - 15 *min*.

V.I. Isakov.
ON THE POSSIBLE EXPLANATION OF OSCILLATIONS OF THE ELECTRON CAPTURE RATE IN THE DECAYS OF THE ONE-ELECTRON IONS. - 15 *min*.

A.V. Glushkov.
ENERGY APPROACH TO DISCHARGE OF METASTABLE NUCLEI DURING NEGATIVE MUON CAPTURE: EXTERNAL GRASER EFFECT. - 15 *min*.

Yu.I. Sorokin.
FEYNMAN PROPAGATOR FOR PARTICLE IN CONSTANT HOMOGENEOUS ELECTROMAGNETIC FIELD. - 15 *min*.

I.V. Glavanakov.
ON THE MECHANISM OF THE DELTA-NUCLEUS PHOTOEXCITATION. - 15 *min*.

Yu.M. Tchuvilsky.
SEARCH FOR PT-NONINVARIANT EFFECTS IN NUCLEAR PROCESSES. - 15 *min*.

M.Ya. Safin.
ASPECTS OF FUNDAMENTAL SYMMETRIES VIOLATION IN THE POLARIZED NEUTRINO-PROTPON AND ELECTRON-PROTON ELASTIC ELECTROWEAK SCATTERING. - 15 *min*.

I.V. Panov.
NEUTRON-INDUCED RATES FOR THE R-PROCESS. - 15 *min*.

A.S. Sitdikov.
THE LOCALLY COVARIANT MESON FIELD. - 15 *min*.

Joint talk:
ELECTRO (WEAK AND MAGNETIC) SPECTRA OF NEUTRAL LEPTONS SCATTERED BY ELECTRONS.
ON THE POSSIBILITY OF STUDING FLAVOR STRUCTURE OF NEUTRAL LEPTONS IN SCATTERING BY AN ELECTRON TARGET.
Reporter *Yu.I. Romanov* – 15 *min.*

A.S. Kayunov.
NEW LIMITS ON THE AXION-ELECTRON COUPLING FOR SOLAR AXIONS PRODUCED BY BREMSSTRAHLUNG PROCESS. - 15 *min*.

July 8, Thursday, 9:00
Section 4
Nuclear reaction theory

Joint talk:
T-ODD ASYMMETRIES FOR PRESCISSION AND EVAPORATION THIRD PARTICLES IN TERNARY FISSION OF NUCLEI BY COLD POLARIZED NEUTRONS.
INTERFERENCE OF SPINS IN SPIN DENSITY MATRIX FOR COMPOUND NUCLEI IN THE REACTION OF NUCLEAR FISSION BY COLD POLARIZED NEUTRONS.
THE DESCRIPTION OF T-ODD ASYMMETRIES FOR ALPHA-PARTICLES IN THE TERNARY FISSION OF ACTINIDE-NUCLEI.
Reporter *S.G. Kadmensky* – 15 *min.*

Joint talk:
THE MECHANISM OF FLIGHT AND T-ODD ASYMMETRY FOR PRESCISSION NEUTRONS.
THE ANGULAR AND SPIN DISTRIBUTIONS OF PRIMARY FISSION FRAGMENTS.
THE QUANTUM CHARACTEISTICS OF QUATERNARY FISSION.
Reporter *S.G. Kadmensky* – 15 *min.*

A.K. Nasirov.
TRUE TERNARY FISSION OF ^{236}U: SEQUENTIAL MECHANISM. - 15 *min*.

V.M. Maslov.
DIRECT AND COMPOUND REACTIONS FOR NEUTRON-INDUCED FISSION CROSS SECTION DETERMINATION. - 15 *min*.

N.E. Aktaev.
MODIFIED KRAMERS APPROACH FOR DESCRIPTION OF FISSION OF EXCITED NUCLEI. - 15 *min*.

F.F. Karpeshin.
THE RIGHT-LEFT ASYMMETRY IN RADIATION AND THE FISSION DYNAMICS. - 15 *min*.

Yu.S. Lutostansky.
PRODUCTION OF TRANSURANIUM ELEMENTS IN BINARY MODEL UNDER CONDITIONS OF PULSE NUCLEOSYNTHESIS. - 15 *min*.

V.P. Zavarzina.
CALCULATIONS OF THE CROSS SECTIONS FOR INCLUSIVE PROCESS OF THE NEUTRAL-CURRENT NEUTRINO-NUCLEUS SCATTERING AT INTERMEDIATE ENERGIES IN AN ANALYTIC APPROACH. - 15 *min*.

A.A. Savchenko.
SPIN CORRELATIONS OF LAMBDA HYPERONS IN THE SELEX EXPERIMENT. - 15 *min*.

G.A. Nigmatkulov.
CORRELATIONS OF ANTIPROTONS WITH SMALL RELATIVE MOMENTUM IN SELEX EXPERIMENT. - 15 *min*.

July 8, Thursday, 9:00
Section 5
Experimental techniques and their applications

V.V. Kuzminov.
MONITORING OF Rn-222 ABUNDANCE IN THE AIR OF LOW-BACKGROUND LABORATORYES WITH ION-PULSE IONISATION CHAMBER. - 15 *min*.

V.V. Dyachkov.
STUDY OF THE CALORIMETRIC EFFECT OF NATURAL RADIOACTIVITY WITH THE INCLUSIVE ENERGY AND MASS SPECTRA. - 15 *min*.

L.Z. Dzhilavyan.
POSSIBILITIES TO PRODUCE RADIOISOTOPES FOR NUCLEAR MEDICINE BY PHOTONUCLEAR REACTIONS AT THE 55-MeV PULSED RACE-TRACK MICROTRON. - 15 *min*.

A.V. Belousov.
THE ASSESSMENT OF BIOLOGICAL EFFECTIVENESS OF THE PHOTONS OF HIGHER ENERGY. - 15 *min*.

V.M. Skorkin.
MEASURING SYSTEM LOW-INTENSITY PROTON BEAM. - 15 *min*.

July 9, Friday, 9:00
Plenary session II

V.G. Nedorezov.
MODIFICATION OF NUCLEONS IN NUCLEAR MEDIUM IN ACCORDANCE WITH NEW EXPERIMENTAL GRAAL DATA ON TOTAL PHOTOABSORPTION CROSS SECTIONS. - 30 *min*.

M.K. Gaidarov.
MOMENTUM DISTRIBUTIONS IN MEDIUM AND HEAVY EXOTIC NUCLEI. - 30 *min*.

S. Krewald.
LOW DENSITY NUCLEAR AND NEUTRON MATTER FROM EFFECTIVE FIELD THEORY. - 30 *min*.

M.G. Urin.
GIANT RESONANCE DAMPING: SEMIMICROSCOPIC DESCRIPTION (METHODS, RESULTS, AND PERSPECTIVES) . - 30 *min*.

Yu. Lutostansky.
GIANT GAMOW-TELLER RESONANCE – 40 YEARS FOR PREDICTION. - 30 *min*.

I.A. Mitropolsky.
СИСТЕМАТИКА ЭНЕРГИЙ ЯДЕРНЫХ ГАММА-ПЕРЕХОДОВ. - 30 *min*.

V.V. Tokarevsky.
PERSPECTIVES OF FEMTOSECOND LASER APPLICATION IN NUCLEAR PHYSICS. - 30 *min*.

S.N. Abramovich
BUBBLE CHAMBER OF CONSTANT SENSITIVITY AS A DETECTOR OF KNOCK-ON TAIL NEUTRONS FROM TOKAMAK PLASMA. - 30 *min*.

July 6 – 9
Poster sessions (poster size less than 1 m x 1 m)
Section 1
Experimental study of nuclear properties and fundamental interactions

L.V. Chulkov.
LIGHT NUCLEI BEYOND THE NEUTRON DRIPLINE.

M.V. Shirchenko.
GAMMA-RADIATION FOLLOWING MUON CAPTURE IN ^{20}Ne.

S.Yu. Torilov.
HIGH-SPIN STATES IN ^{22}Ne.

A.N. Vodin.
COLLECTIVE EFFECTS IN THE RADIATIVE DECAY OF ISOBAR-ANALOG STATES IN NUCLEI WITH $20 < A < 40$.

B.V. Zhuravlev.
NUCLEAR LEVEL DENSITIES OF ^{47}V, ^{48}V, ^{49}V, ^{53}Mn, ^{54}Mn FROM NEUTRON EVAPORATION SPECTRA.

N. Burtebayev.
LIFETIMES OF EXCITED STATES OF ^{48}Ti, ^{52}Cr AND ^{80}Se.

I.E. Smirnova.
MUON CAPTURE RATES ON THE LEVELS OF ^{48}Sc.

O.V. Bespalova.
THE ANALYSIS OF PROTON SHELL STRUCTURE OF ^{64,66,68}Zn NUCLEI BY THE MEAN FIELD APPROUCH WITH DISPERSIVE OPTICAL-MODEL POTENTIAL.

O.V. Bespalova.
THE STUDY OF THE FEATURES OF NEUTRON SHELL STRUCTURE OF

^{70,72,74,76}Ge NUCLEI.

V.A. Morozov.
MEASUREMENT OF ^{90}Sr ABSOLUTE RADIOACTIVITY USING A SINGLE-CRYSTAL SCINTILLATION METHOD.

A.V. Davydov.
THE SUMMARY OF EXPERIMENTAL RESULTS ON THE OBSERVATION OF A GAMMA RESONANCE OF A LONG-LIVED ISOMER Ag-103m.

A.V. Davydov.
ONCE MORE ON THE DURATION OF THE NUCLEAR GAMMA RAY ABSORPTION AND EMISSION PROCESSES.

Yu.L. Khazov.
EVALUATED NUCLEAR STRUCTURE AND DECAY DATA FOR A=133 MASS CHAIN.

L.I. Govor.
ON ROTATIONAL BANDS WITH $K^{\pi}=0^{+}$ IN ^{178}Hf.

E.P. Grigoriev.
NEW STATES IN BANDS OF ^{160}Gd.

A.P. Dubenskiy.
WEAK CORRELATION BETWEEN ISOMER EXCITATION PROBABILITIES AND GROUND STATE DEFORMATION PARAMETERS.

A.I. Levon.
NUCLEAR g-FACTORS AND STRUCTURE OF HIGH-SPIN ISOMERS IN ^{190,192,194}Pt AND ^{196,198}Hg.

J. Berzins.
POSSIBLE TRIAXIAL STRUCTURES IN THE ODD-ODD RHENIUM-188 NUCLEUS.

V.V. Varlamov.
DIGITAL CHART OF GDR MAIN PARAMETERS FOR BASIC AND APPLIED RESEARCH.

V.O. Sergeev.
SYSTEMATICS OF M3-TRANSITIONS.

V.N. Kondratiev.
МАГИЧНЫЕ УЛЬТРАНАМАГНИЧЕННЫЕ ЯДРА В ВЗРЫВНОМ НУКЛЕОСИНТЕЗЕ.

V.P. Chechev.
THE EVALUATION OF HALF-LIVES AND OTHER DECAY DATA USED IN NUCLEAR ASTROPHYSICS AND COSMOCHRONOLOGY.

I.V. Zhitnikov.
NEUTRINO HELICITY MEASUREMENT WITH COMPTON POLARIMETER.

Yu.V. Volkov.
REGISTRATION OF AXION RADIATION FROM THE SUN.

E.M. Drobyshevski.
DISCOVERY OF NUCLEAR-ACTIVE DARK ELECTRIC MATTER OBJECTS.

Section 2
Experimental study of nuclear reactions

I.V. Kurguz.
RESONANCE-LIKE STRUCTURE OBSERVED IN $^{40}Ar(p,\gamma)^{41}K$ REACTION.

V.M. Tsoupko-Sitnikov.
CALCULATION OF SPALLATION NEUTRON SPECTRA AND TRANSMUTATION REACTION RATES.

J. Adam.
A FEASIBILITY STUDY OF NON-ELASTIC REACTION IN THORIUM AND URANIUM BY THE SPALLATION NEUTRONS.

A.N. Savrasov.
EXCITATION OF $^{93,94,95}Tc$ ISOMERS IN (p,n), (d,γ) AND (d,n) - REACTIONS.

A.N. Savrasov.
EXCITATION OF THE ISOMERIC STATES IN $^{116,120}Sb$ WITH THE 8^- HIGH SPINS.

A.N. Savrasov.
ISOMERIC YIELDS RATIOS OF ^{240}Pu AND ^{241}Am PHOTOFISSION FRAGMENTS.

M.G. Nguyen.
CALCULATION SPALLATION NEUTRON YIELD FOR ADS TARGETS.

G.V. Danilyan.
SEARCH FOR T-ODD CORRELATIONS IN PROMPT FISSION NEUTRON EMISSION IN FISSION OF ^{235}U INDUCED BY COLD POLARIZED NEUTRONS.

A.A. Kulko.
DIRECT REACTIONS IN THE INTERACTION OF DEUTERONS WITH ^{45}Sc AND ^{194}Pt.

V.M. Bystritsky.
ИЗМЕРЕНИЕ АСТРОФИЗИЧЕСКИХ S-ФАКТОРОВ И ПОТЕНЦИАЛОВ ЭЛЕКТРОННОГО ЭКРАНИРОВАНИЯ ДЛЯ РЕАКЦИИ d(d,n) He^3, ПРОТЕКАЮЩЕЙ В ДЕЙТЕРИДАХ МЕТАЛЛОВ.

R.V. Revenko.
POPULATION OF EXCITED STATES IN ^{6}He AND ^{6}Li NUCLEI IN THE REACTION ^{4}He+^{9}Be.

G.A. Radyuk.
COMPARISON OF THE ASYMPTOTICAL NORMALIZATION COEFFICIENTS FOR ^{10}B - ^{9}B+n AND ^{10}B - ^{9}Be+p CONFIGURATION OBTAINED FROM ^{10}B(d,t)^{9}B AND ^{10}B(d,^{3}He)^{9}Be REACTIONS.

P. Figuera.
STUDY OF THE COLLISIONS ^{9,10,11}Be+^{64}Zn: EFFECTS OF THE ^{11}Be HALO STRUCTURE ON THE REACTION MECHANISMS AROUND THE COULOMB BARRIER.

N. Burtebaev.
INVESTIGATION OF ELASTIC SCATTERING OF ^{12}C, ^{16}O AND ^{14}N ON THE ^{12}C, ^{16}O NUCLEI AT ENERGIES NEAR THE COULOMB BARRIER.

G.H. Hovhannisyan.
INTERACTION OF ^{12}C IONS WITH THE ENRICHED ISOTOPES ^{112,118,120,124}Sn.

K.A. Kuterbekov.
ISOMERIC RATIOS FOR ^{196,198}Tl AND ^{196,198}Au FROM FUSION AND TRANSFER IN THE INTERACTION OF ^{6}He WITH ^{197}Au.

V.M. Lebedev.
INVESTIGATION OF ALPHA SCATTERING ON ^{24}MG AT 30.3 MeV.

W.U. Schroeder.
ISOSPIN OBSERVABLES IN MEDIUM-ENERGY HEAVY-ION REACTIONS.

S.Yu. Platonov.
MECHANISM OF THE REACTIONS LEADING TO THE SUPERHEAVY ELEMENTS WITH Z > 120.

V.I. Serov.
THE THREE-PARTICLE DECAY AND POPULATION THE NUCLEAR STATES IN THREE-PARTICLE REACTION OF THE LIGHT AND HEAVY NUCLEI.

S.R. Palvanov.
EXCITATION OF ISOMERIC STATES IN REACTIONS (γ,n) AND (n,2n) ON ^{74,82}Se NUCLEI.

S.R. Palvanov.
PHOTOEXCITATION OF ISOMERIC STATES IN REACTIONS (γ,n) AND (γ,2n) ON ^{113}In NUCLEI IN THE RANGE 12-35 MeV.

S.Y. Troschiev.
YIELDS OF PHOTONUCLEAR REACTIONS ON ^{197}Au AT 30 MeV BREMSSTRAHLUNG.

I.V. Makarenko.
MULTIPARTICLE PHOTONUCLEAR REACTIONS IN ^{85,87}Rb ISOTOPES.

I.V. Makarenko.
MULTIPARTICLE PHOTODISINTEGRATION OF Mo ISOTOPES.

V.A. Chetvertkova.
PHOTODISINTEGRATION OF Sn ISOTOPES.

D. Testov.
REGISTRATION β-DELAYED 1, 2-NEUTRONS EMISSION FROM

PHOTOFISSION FRAGMENTS OF ^{238}U AT MK-25(FLNR, DUBNA) AND PARNNE (IPN, ORSAY).

V.N. Stibunov.
STUDY OF THE SPIN-DEPENDENT OBSERVABLES IN PION PHOTOPRODUCTION ON THE TENSOR POLARIZED DEUTERON.

A.V. Osipov.
INCOHERENT NEUTRAL PION PHOTOPRODUCTION ON THE TENSOR POLARIZED DEUTERON.

B.S. Slowinski.
INVESTIGATION OF THE CORRELATION BETWEEN THE RAPIDITY AND IMPACT PARAMETER IN PION-XENON INTERACTIONS AT INTERMEDIATE ENERGIES.

V.V. Gauzshtein.
MEASUREMENT OF THE TENSOR ANALYSING POWER OF THE NEGATIVE PION PHOTOPRODUCTION ON THE DEUTERON.

P.D. Ioannou.
THE ENERGETIC CHARACTERISTICS OF A FISSIONABLE NUCLEUS IN A SCISSION POINT.

D.V. Kamanin.
CONFIRMATION OF COLLINEAR CLUSTER TRI-PARTITION OF ^{252}Cf (SF) BY NEUTRON GATED DATA.

A.I. Svirikhin.
МНОЖЕСТВЕННОСТЬ НЕЙТРОНОВ СПОНТАННОГО ДЕЛЕНИЯ ИЗОТОПА ^{246}Fm.

A.A. Voinov.
STUDY OF THE COMPLETE-FUSION REACTION ^{226}Ra+^{48}Ca.

E.A. Kuzmin.
DEEP SUBBARRIER FUSION ^{28}Si + ^{208}Pb RESEARCH.

Section 3
The theory of atomic nucleus and fundamental interactions

V.I. Kovalchuk.
SOLUTION OF THE FADDEEV EQUATIONS FOR BOUND STATE OF TRITON USING K-HARMONICS EXPANSION.

L.A. Malov.
PAIR CORRELATIONS IN WIGNER FUNCTION MOMENTS METHOD (SCISSORS MODE).

G.K. Nie.
NUCLEAR ENERGIES AND RADII OF THE IZOTOPES WITH Z=50-55.

V.S. Kinchakov.
BINDING ENERGIES OF NUCLEI WITH BKN NUCLEON-NUCLEON FORCES IN THE BRINK MODEL.

A.I. Georgieva.
DEVELOPMENT OF COLLECTIVITY IN THE DYNAMICAL SYMMETRIES OF THE SYMPLECTIC INTERACTING VECTOR BOSON MODEL.

S. Shlomo.
PROPERTIES OF NUCLEAR MATTER CREATED IN INTERMEDIATE ENERGY HEAVY-ION COLLISION.

A.M. Nurmulhamedov.
DEPENDENCY OF THE ENERGY OF SPIN-ORBIT INTERACTION FROM THE PAIR ENERGY.

A.M. Nurmulhamedov.
DRIP LINE OF PROTON AND NEUTRON IN THE FRAMEWORK OF WIGNER MASS FORMULA.

A.M. Nurmulhamedov.
EMPIRICAL UNIT OF NUCLEAR MASS.

A.M. Nurmulhamedov.
PAIR ENERGY IN ATOMIC NUCLEI.

A.M. Nurmulhamedov.
THE ELECTROMAGNETIC PROPERTIES OF EVEN-EVEN CADMIUM ISOTOPES.

K.E. Ramankulov.
THE FERMION DYNAMICAL SYMMETRY MODELS AND BOZON MAPPING OF THEM.

R.B. Panin.
CUBIC BOSON TRANSFORMATION.

B.S. Dolbilkin.
HIGHLY EXCITED COLLECTIVE STATES AT HOT NUCLEI INTERACTIONS.

A.A. Vasilev.
DYNAMICAL CORRECTIONS TO THE ENERGY LEVELS OF MUONIC ATOMS AND THE NUCLEAR STRUCTURE.

O.Yu. Khetselius.
RELATIVISTIC MANY-BODY PERTURBATION THEORY: ATOMIC PARITY NONCONSERVATION EFFECT IN HEAVY ATOMIC SYSTEMS.

O.Yu. Khetselius.
SPECTROSCOPY OF THE HADRONIC ATOMS AND SUPERHEAVY IONS: SPECTRA, ENERGY SHIFTS AND WIDTHS FOR DIFFERENT NUCLEAR MODELS.

A.V. Glushkov.
BOUND BETA-DECAY AND DECAY OF ISOMERIC STATES FOR FULLY IONIZED ATOMS.

S.N. Fedotkin.
ANNIHILATION POSITRON AND ATOMIC ELECTRON AT β+–DECAY.

V.M. Kartashov.
NONSTATIONARY PROCESS IN RADIOACTIVE LUTETIUM OXID AS POSSIBLE DISPLAY OF TIME INVARIANCE BREAKDOWN.

E.V. Mastropas.
TRANSLATIONAL SYMMETRY BREAKING OF THE BOSE-VACUUM BY THE STRONG INTERACTION OF A HADRON WITH VECTOR BOSE-FIELD.

V.R. Shaginyan.
THE BARYON ASYMMETRY OF THE UNIVERSE AS MANIFESTATION OF QUANTUM PHASE TRANSITION.

I.V. Kopytin.
PLASMON EXCITATION DURING ASTROPHYSICAL NUCLEAR FUSION REACTIONS.

I.V. Kopytin.
HIGH ORDER DIAGRAM CONTRIBUTION TO NEUTRINO PRODUCTION AT STELLAR ENVIRONMENT.

E.L. Kryshen.
NUCLEAR INCOMPRESSIBILITY AND NEUTRON STARS.

I.Yu. Korneev.
SYNTHESIS OF SUPERHEAVY ELEMENTS IN THE R-PROCESS.

V.A. Sadovnikova.
INFLUENCE OF THE POLARIZATION OPERATOR IMAGINARY PART ON THE DISPERSION EQUATION SOLUTIONS.

A.Yu. Loginov.
THE KINK OF NONLINEAR O(3) SIGMA-MODEL WITH AN EXTERNAL SOURCE.

Section 4
Nuclear reaction theory

V.L. Lyuboshitz.
LOW-ENERGY ELASTIC SCATTERING OF A POLARIZED NEUTRON ON A POLARIZED PROTON.

O.V. Fotina.
INFLUENCE OF ALPHA-CLUSTERING AT ALPHA PARTICLES PRODUCTION DURING THE NON-EQUILIBRIUM STAGE OF THE NUCLEAR REACTIONS.

A.L. Litnevsky.
NUMERICAL ANALYSIS OF ACCURACY OF THE KRAMERS FORMULA FOR FISSION RATE OF EXCITED NUCLEI: TWO-PARABOLAS POTENTIAL CASE.

A.L. Litnevsky.
THE INFLUENCE OF THE COLLECTIVE POTENTIAL FORM ON THE QUASISTATIONARY FISSION RATE OF HIGHLY EXCITED NUCLEI.

N. Rowley.
EVAPORATION-RESIDUE CROSS SECTIONS; ROLE OF THE ENTRANCE CHANNEL.

O.N. Ghodsi.
SURFACE NUCLEON AND INTERNUCLEAR POTENTIAL IN HEAVY IONS REACTIONS.

A.S. Petrova.
THE VACUUM POLARIZATION EFFECTS IN THE FIELD OF SUPERHEAVY QUASIMOLECULES AND DELAYED COLLISIONS OF HEAVY NUCLEI.

S.B. Dubovichenko.
ASTROPHYSICAL S-FACTOR OF $^{4}He^{12}C$ RADIATIVE CAPTURE.

B.A. Prmantaeva.
THE ANALYSIS OF THE PROTON SCATTERING FROM THE ^{9}C NUCLEUS WITHIN THE GLAUBER FORMALISM.

A.T. D'yachenko.
ON THE HARDENING OF THE SPECTRUM OF HIGH-ENERGY PARTICLES FORMED IN HEAVY-ION COLLISIONS CONSIDERED WITHIN THE FRAMEWORK OF THE HYDRODYNAMIC APPROACH.

D.O. Eremenko.
DYNAMICAL MODEL ANALYSIS OF THE $^{16}O+^{238}U$ REACTION.

J. Lubian.
FUSION ENHANCEMENT/SUPPRESSION AND IRREVERSIBILITY IN REACTIONS INDUCED BY WEAKLY BOUND NUCLEI.

G.K. Nie.
PARAMETERS OF THE BOUND STATE POTENTIAL AND THE RADIUS

OF THE LAST PROTON POSITION IN SYMMETRICAL NUCLEI.

S.P. Tretyakova.
ANALYSIS OF ^{223}Ac CLUSTER RADIOACTIVITY.

V.Yu. Denisov.
ELASTIC SCATTERING OF $^{12}C+^{12}C$, $^{16}O+^{12}C$, $^{16}O+^{16}O$ AND NUCLEUS-NUCLEUS POTENTIAL WITH REPULSIVE CORE.

V.Yu. Denisov.
INFLUENCE OF ANTISYMMETRIZATION AND PAULI EFFECTS ON $^{40}Ca+^{40}Ca$ INTERACTION POTENTIAL.

V.Yu. Denisov.
INTERACTION POTENTIAL AND FUSION OF TWO DEFORMED NUCLEI.

V.Yu. Denisov.
α - DECAY OF EVEN-EVEN SUPERHEAVY ELEMENTS.

V.I. Kovalchuk.
PHASE SHIFT CALCULATIONS FOR NEUTRON-DEUTERON SCATTERING BELOW BREAKUP THRESHOLD.

V.I. Kovalchuk.
PRECISE CALCULATIONS OF ND SCATTERING CROSS SECTIONS AND ANALYZING POWERS AT INTERMEDIATE ENERGIES BASED ON THE GLAUBER FORMULATION.

Yu.E. Kozyr.
FLEXIBLE RESONATING GROUP BASIS FOR SCATTERING $^{3}H(d,d)^{3}H$ AT E = 1.5 – 8 MeV.

A.I. Lengyel.
PARAMETRISATION OF FISSION NEUTRON YIELDS.

M.M. Mirabutalybov.
EXCITAION OF GIANT RESONANCES IN NUCLEI BY INELASTIC SCATTERING OF PROTONS.

M.M. Mirabutalybov.
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