

NUCLEUS 2012

JUNE, 25 (Monday)

Plenary session I

10:00

10:00 – 10:20: N.S. Zelenskaya (Moscow, SINP MSU) **120 YEARS ANNIVERSARY OF ACADEMICIAN D.V. SKOBELTSYN**

10:10 – 10:40: Yu.Ts. Oganessian (Dubna, JINR) **SYNTHESIS OF NEW ELEMENTS – PRESENT AND FUTURE**

10:45 – 11:15: Yu.E. Penionzhkevich (Dubna, JINR) **SUPER-NEUTRON-RICH NUCLEI OF LIGHT ELEMENTS. RESULTS AND PERSPECTIVES**

11:20 – 11:50: G.M. Gurevich (Moscow, INR RAS) **MEASUREMENT OF SPIN POLARISABILITIES OF THE NUCLEON**

11:55 – 12:25: V.A. Karnaukhov (Dubna, JINR) and FASA collaboration. **PROPERTIES OF HOT NUCLEI PRODUCED IN COLLISIONS OF LIGHT RELATIVISTIC IONS WITH HEAVY TARGET**

12:30 – 12:50: *Coffee break*

12:50 – 13:20: V.I. Kukulín (Moscow, SINP MSU), M.N. Platonova. **SHORT-RANGE COMPONENTS OF NUCLEAR FORCES: EXPERIMENT VS. MYTHOLOGY**

13:25 – 13:55: A.A. Dzhioev, A.I. Vdovin (Dubna, JINR) **INELASTIC NEUTRINO-NUCLEUS SCATTERING IN HOT AND DENSE STELLAR ENVIRONMENT.**

14:00 – 15:30 – *Lunch*

JUNE, 25 (Monday)**Section II****Experimental investigations of nuclear reactions mechanisms****Oral Session****15:30**

N.I. Vogel, V.A. Skvortsov. **LASER-INDUCED NUCLEAR REACTIONS AND TARGET RADIOACTIVITY WITH MODEST LASER PULSE ENERGY OF ~ 200 mJ.**

V.V. Varlamov, N.N. Peskov, M.E. Stepanov. **PARTIAL PHOTONEUTRON REACTION CROSS SECTIONS ON ^{115}In AND NEUTRON MULTIPLICITY SORTING.**

Joint talk:

V.M. Mazur, D.M. Symochko, Z.M. Bigan, P.S. Derechkey. **THE CROSS-SECTIONS OF (γ, n) REACTIONS FOR ^{120}Te AND ^{122}Te ISOTOPES IN THE E1-GIANT RESONANCE ENERGY REGION.**

V.M. Mazur, D.M. Symochko, Z.M. Bigan, P.S. Derechkey. **INVESTIGATION OF ISOMERIC YIELDS RATIOS IN (γ, n) REACTIONS ON ^{127}Te NUCLEUS FOR THE 10-20 MeV ENERGIES.**

Reporter D.M. Symochko

Joint talk:

S.A. Karamian. **THRESHOLD DEPENDENCE OF THE NUCLEON-EMISSION YIELDS IN REACTIONS INDUCED BY PHOTONS.**

S.A. Karamian. **PECULIAR BEHAVIOR OF THE YIELDS FOR DIFFERENT REACTIONS INDUCED BY PHOTONS.**

S.A. Karamian. **REACTIONS WITH ISOMERS AS A PROBE OF THE LEVEL DENSITY AT INTERMEDIATE SPINS AND ENERGIES.**

Reporter S.A. Karamian

D.A. Gorelov, T. Eronen, J. Hakala, A. Jokinen, A. Kankainen, P. Karvonen, V. Kolhinen, I. Moore, H. Penttilä, I. Pohjalainen, M. Reponen, S. Rinta-Antila, J. Rissanen, V. Rubchenya, A. Saastamoinen, J. Äystö. **EXPERIMENTAL STUDY OF FISSION PRODUCTS YIELD DISTRIBUTIONS WITH JYFLTRAP.**

V.A. Zheltonozhsky, A.M. Savrasov. **ISOMERIC RATIOS IN ^{233}U AND ^{241}Am PHOTOFISSION FRAGMENTS.**

S.S. Belyshev, A.N. Ermakov, B.S. Ishkhanov, V.V. Khankin, A.S. Kurilik, A.A. Kuznetsov, V.I. Shvedunov, K.A. Stopani. **MASS DISTRIBUTION OF ^{238}U PHOTOFISSION PRODUCTS.**

V.P. Pikul, Yu.N. Koblik, G.A. Abdullaeva, A.F. Nebesniy, A. P. Morozov. **ENERGY CHARACTERISTICS OF FISSIONABLE NUCLEUS IN SCISSION POINT FOR DIFFERENT FISSION MODES.**

G.V. Sinev, G.A. Nigmatkulov on behalf of the SELEX collaboration. **CORRELATION FEMTOSCOPY OF KAONS IN THE SELEX EXPERIMENT.**

A.V. Voinov, S.M.Grimes **LEVEL DENSITY PROBLEM IN NUCLEAR REACTION CODES. CALCULATIONS VERSUS EXPERIMENT**

Section III
Theory of atomic nucleus and fundamental interactions
Oral Session

15:30

V.A. Kulikov, P. Maris, A.I. Mazur, A.M. Shirokov², J.P. Vary. **LIGHT NUCLEI WITH JISP-TYPE NN INTERACTION AND WITH OTHER MODERN STRONG INTERACTION MODELS**

O.A. Rubtsova. **NEW TREATMENT OF THE FEW-BODY BREAKUP**

N.N. Arsenyev, A.P. Severyukhin, V.V. Voronov, N. Pietralla, Nguyen Van Giai. **DESCRIPTION OF PROPERTIES OF QUADRUPOLE STATES IN ⁹⁴Mo WITH SKYRME INTERACTION**

Joint talk:

K.A. Gridnev², W. Greiner, V.N. Tarasov, S. Schramm, D.K. Gridnev, D.V. Tarasov, X. Viñas. **INVESTIGATION OF SUPER DEFORMATION MANIFESTATIONS IN NUCLEI WITH EXTREME NEUTRON EXCESS.**

V.N. Tarasov, K.A. Gridnev², W. Greiner, S. Schramm, D.K. Gridnev, D.V. Tarasov, X. Viñas. **THE PENINSULA OF NEUTRON STABILITY OF NUCLEI IN THE NEIGHBORHOOD OF NEUTRON MAGIC NUMBER N = 126**

Reporter K.A. Gridnev

Y. Martinez Palenzuela, L. Felipe Ruiz, A. Karpov, V. Zagrebaev, W. Greiner **CALCULATION OF NUCLEAR GROUND STATES PROPERTIES WITHIN THE STATISTICAL LEARNING FRAMEWORK**

A.P. Severyukhin, V.V. Voronov, H. Sagawa, Nguyen Van Giai. **EFFECTS OF TENSOR INTERACTION ON GAMOW-TELLER STATES IN ^{118,120}Sn**

N.G. Goncharova, Iu.A. Skorodumina. **SPIN AND ORBITAL NUCLEAR**

CURRENTS' INTERFERENCE IN THE ELECTROEXCITATION OF $1f_{2p}$ -SHELL NUCLEI

A.I. Chugunov, A.V. Afanasjev, M. Beard, M. Wiescher, D.G. Yakovlev. **SIMPLE ANALYTIC MODEL FOR ASTROPHYSICAL S-FACTORS.**

Joint talk:

K. Baktybayev, N. Koilyk, K. Ramankulov. **BOSON MAPPING OF THE FERMION DYNAMICAL MODEL OF NUCLEI.**

K. Baktybayev. **FERMION MICROSCOPIC BASIS OF THE INTERACTING BOSON MODEL**

Reporter K. Baktybayev

Section IV
Nuclear reactions theory
Oral Session
15:30

M.N. Platonova, V.I. Kukulín. **MANIFESTATION OF QUARK DEGREES OF FREEDOM IN BACKWARD pD SCATTERING.**

T.L. Belyaeva, A.S. Demyanova, S.A. Goncharov, A.A. Ogloblin. **(d,p) REACTIONS AS A PROBE FOR NEUTRON HALO IN EXCITED STATES OF NUCLEI.**

L.I. Galanina, N.S. Zelenskaya. **THE ANALYSIS OF (t, p) REACTIONS ON $^{7,9}\text{Li}$ ISOTOPES.**

Yu.L. Ratis. **NUCLEAR REACTIONS AT THE Δ -ISOBAR EXCITATION REGION.**

E.T. Ibraeva, O. Imambekov, P.M. Krassovitskiy, A.L. Koslovsky. **RESCATTERING EFFECTS IN PROTON ELASTIC SCATTERING FROM ^{15}N NUCLEUS.**

S.V. Artemov, G.K. Nie, M.A. Kayumov, E.A. Zaparov. **RATIO OF THE NEUTRON ASYMPTOTICAL NORMALIZATION COEFFICIENT TO THE PROTON'S ONE FOR MIRROR NUCLEI ^{11}B AND ^{11}C FROM ANALYSIS OF DIRECT REACTIONS.**

Ya.A. Berdnikov, A.E. Ivanov, V.T. Kim, V.A. Murzin. **HADRON PRODUCTION IN HADRON-NUCLEUS INTERACTIONS AT HIGH ENERGIES**

JUNE, 26 (Tuesday)**Plenary session II****9:00**

9:00 – 9:30: A.A. Ogloblin (Moscow, Kurchatov Institute), T.L. Belyaeva, A.S. Demyanova, **“GHOST” OF ALPHA-PARTICLE CONDENSATE IN NUCLEI**

9:35 – 10:05: A.A. Pasternak (S.-Petersburg, Ioffe Physical Technical Institute), D.B. Gin. **NEW EXPERIMENTAL RESULTS OF ATOMIC NUCLEI CHIRALITY STUDIES. NUCLEI OF $A \approx 120$ AND $A \approx 190$**

10:10 – 10:40: W. Furman (Dubna, JINR), J. Adam, M.Artyushenko, A.Baldin, A.Berlev, V.Chilap, B.Dubinkin, A.Chinenov, B.Fonarev, M.Galanin, N.Gundorin, B.Gus'kov, M.Kadykov, A.Khilmanovich, S.Kislitsin, V.Kolesnikov, Yu.Kopatch, S.Korneev, E.Kostyuhov, M. Kucheryavii, A. Makan'kin, B.Marcynkevich, I.Mar'in, A.Potapenko, A.Rogov, A.Safronova, V. Schegolev, A.Solnyshkin, S.Solodchenkova, V.Sotnikov, V.Stegailov, O.Svoboda, V.Tsupko-Sitnikov, S.Tyutyunnikov, A. Vishnevsky, N.Vladimirova, V.Voronko, V.Wagner, W.Westmeier, S. Zhdanov, I.Zhuk. **NEW ADS SCHEME WITH DEEP SUBCRITICAL MULTIPLYING CORE FOR ENERGY PRODUCTION AND TRANSMUTATION OF RADIOACTIVE WASTES. FIRST EXPERIMENTAL RESULTS AND PERSPECTIVES**

10:45 – 11:15: S.G. Kadmsky (Voronezh, VSU), D.E. Lubashevsky **MECHANISMS OF THE FORMATION OF THE P-ODD, P-EVEN AND T-ODD ASYMMETRIES IN THE ANGULAR DISTRIBUTIONS OF PRODUCTS OF BINARY AND TERNARY NUCLEAR FISSION BY COLD POLARIZED NEUTRONS**

11:20 – 11:40: *Coffee break*

11:40 – 12:10: V.Z. Goldberg (USA, Texas A&M University) **UNUSUAL STATES IN LIGHT NUCLEI**

12:15 – 12:45: A.M. Shirokov (Moscow, SINP MSU), J.P.Vary, P.Maris, A.I.Mazur, V.A.Kulikov. **NO-CORE FULL CONFIGURATION APPROACH: *AB INITIO* THEORY OF LIGHT NUCLEI.**

12:50 – 13:20: S.Yu. Igashov, I.V. Safonov, M.H. Urin. (Moscow, NRNU MEPhi) **PROBLEMS OF EXPERIMENTAL AND THEORETICAL STUDIES OF THE GAMOW-TELLER RESONANCE IN ANTIMONY ISOTOPES**

13:25 – 13:55: V.B.Brudanin, V.G.Egorov **GEMMA AND DANSS – EXPERIMENTS WITH THE REACTOR ANTINEUTRINO**
 14:00 – 15:30 – *Lunch*

JUNE, 26 (Tuesday)

Section I

Experimental investigations of atomic nucleus properties

Oral Session

15:30

B.G. Novatsky, E.Yu. Nikolsky, S.B. Sakuta, D.N. Stepanov. **SEARCH FOR NUCLEAR STABLE MULTINEUTRONS AND THEIR IDENTIFICATION IN THE CHANNELS OF THE MULTIPLE NEUTRONS CAPTURE.**

B.A. Chernyshev, Yu.B. Gurov, L.Yu. Korotkova, S.V. Lapushkin, D.Yu. Markov, T.D. Schurenkova. **STUDY OF HIGHLY EXCITED STATES OF THE ^8Li ISOTOPE.**

S.I. Sidorchuk, A.A. Bezbakh, V. Chudoba, I.A. Egorova, A.S. Fomichev, M.S. Golovkov, A.V. Gorshkov, V.A. Gorshkov, L.V. Grigorenko, G.Kaminski, S.A. Krupko, E.A. Kuzmin, E.Yu. Nikolskii, Yu.Ts. Oganessian, Yu.L. Parfenova, P.G. Sharov, R.S. Slepnev, S.V. Stepanov, G.M. Ter-Akopian, R. Wolski. **CORRELATION STUDIES OF ^{10}He LOW-ENERGY SPECTRUM.**

K.P. Marinova, I. Angeli. **N AND Z DEPENDENCE OF NUCLEAR CHARGE RADII AND CORRELATION WITH OTHER SPECTROSCOPIC OBSERVABLES.**

Yu.A. Baurov, V.A. Nikitin, V.B. Dunin, N.A. Demchuk, A.Yu. Baurov, V.V. Tikhomirov, C.V. Sergeev, A.Yu. Baurov (junior). **THE RESULTS OF PERMANENT EXPERIMENTAL INVESTIGATIONS OF ^{60}Co β -DECAY RATE CHANGE DURING 2010–2011.**

Joint talk:

Yu.A. Vaganov, V.G. Kalinnikov, V.I. Stegailov, A.V. Sushkov, Yu.V. Yushkevich, N.Yu. Shirikova. **STUDY OF THE DECAY $^{157}\text{Er} \rightarrow ^{157}\text{Ho}$.**

Yu.A. Vaganov, Z. Hons, V.G. Kalinnikov, V.I. Stegailov, A.V. Sushkov, N.Yu. Shirikov. **STUDY OF THE DECAY $^{156}\text{Ho} \rightarrow ^{156}\text{Dy}$.**

P. Aleksa, V.M. Gorozhankin, Z. Hons, V.G. Kalinnikov, J. Kvasil, V.I. Stegailov, A.V. Sushkov, N.Yu. Shirikova. **EXPERIMENTAL AND THEORETICAL STUDIES OF THE STRUCTURE OF THE NONROTATIONAL STATES IN NUCLEI $^{155,157,159,161,163,165}\text{Ho}$.**

Reporter V.I. Stegailov

I.N. Vyshnevsky, S.S. Drapey, V.A. Zheltonozhsky, A.M. Savrasov. **PENETRATION EFFECTS IN THE E1 AND E2 HINDERED TRANSITIONS IN THE Sn NUCLEI.**

E.A. Bychkova, N.N. Peskov, M.E. Stepanov, V.V. Varlamov. **COMPETITION OF DECAY CHANNELS OF ^{90}Zr GDR AND ITS ISOSPIN SPLITTING.**

Joint talk:

N.N. Kolesnikov. **ALPHA-STABILITY OF SUPERHEAVY NUCLEI.**

N.N. Kolesnikov. **BETA-STABILITY OF SUPERHEAVY NUCLEI.**

N.N. Kolesnikov. **NUCLEAR SHELLS AND THE STRUCTURE OF THE ENERGY SURFACE OF HEAVY ELEMENTS.**

Reporter N.N. Kolesnikov

V.K. Utyonkov, M.V. Shumeiko, **ALGORITHMS OF SEARCH FOR RARE DECAYS IN THE EXPERIMENTS ON THE SYNTHESIS OF SUPERHEAVY NUCLEI**

Section II

Experimental investigations of nuclear reactions mechanisms

Oral Session

15:30

L.Z. Dzhilavyan, V.G. Nedorezov. **THE ^{238}U PHOTOFISSION IN THE GIANT RESONANCE REGION**

I.N. Vyshnevsky, V.A. Zheltonozhsky, A.M. Savrasov. **ISOMERIC CROSS-SECTIONS RATIOS FOR $^{120\text{m,g}}\text{Sb}$ IN (p,n)-REACTION FOR NEAR THRESHOLD REGION.**

A. Duisebayev, B.A. Duisebayev, T.K. Zholdybayev, B.M. Sadykov, K.M. Ismailov. **DOUBLE-DIFFERENTIAL AND INTEGRAL CROSS-SECTION OF (p,xp) REACTION ON ^{58}Ni NUCLEUS AT $E_p=29.9$ MeV.**

S.P. Avdeyev, V.A. Karnaukhov, V.V. Kirakosyan, P.A. Rukoyatkin, H. Oeschler, W. Karcz, E. Norbeck, A.S. Botvina. **FROM SEQUENTIAL PROCESSES TO MULTIFRAGMENTATION IN PROTON REACTIONS WITH GOLD.**

A.Yu. Bordanovskii, A.A. Volkov, D.K. Elumahov, V.P. Efremov, A.Yu. Kalinin, A.V. Korablev, A.N. Krinitsyn, V.I. Kryshkin, N.V. Kulagin, V.V. Skvortsov, V.V. Talov, L.K. Turchanovich. **PRODUCTION OF HADRONS AT LARGE TRANSVERSE MOMENTUM IN 50 GeV p-NUCLEUS COLLISIONS.**

I.P. Bondarenko, T.A. Ivanova, V.A. Khryachkov, B.D. Kuzminov, N.N. Semenova, A.I. Sergachev. **EXPERIMENTAL INVESTIGATION OF $^{19}\text{F}(n,\alpha)^{16}\text{N}$ REACTION EXCITATION FUNCTION IN 4-7.35 MeV ENERGY REGION.**

T.A. Ivanova, I.P. Bondarenko, V.A. Khryachkov, B.D. Kuzminov, N.N. Semenova, A.I. Sergachev. **NEW EXPERIMENTAL DATA FOR $^{10}\text{B}(n,\alpha)^4\text{He}$ REACTION.**

V.A. Khryachkov, I.P. Bondarenko, T.A. Ivanova, B.D. Kuzminov, N.N. Semenova, A.I. Sergachev. **INVESTIGATION OF FAST NEUTRON INTERACTION WITH CHROMIUM NUCLEI.**

L.I. Galanina, N.S. Zelenskaya, I.A. Konyuhova, V.M. Lebedev, N.V. Orlova, A.V. Spassky. **THE ORIENTATION PARAMETERS OF $^{24}\text{Mg}(2^+)$ FROM CORRELATION EXPERIMENTS IN $^{24}\text{Mg}(d, d\gamma)^{24}\text{Mg}$ REACTION.**

L.I. Galanina, N.S. Zelenskaya, I.A. Konyuhova, V.M. Lebedev, N.V. Orlova, A.V. Spassky, S.V. Artemov. **INVESTIGATION OF d -SCATTERING ON ^{24}Mg AT $E_d = 15.3$ MeV.**

O.O. Beliuskina, V.I. Grantsev, K.K. Kisurin, S.E. Omelchuk, G.P. Palkin, Yu.S. Roznyuk, B.A. Rudenko, V.S. Semenov, L.I. Slusarenko, B.G. Struzhko. **ENERGY AND ANGULAR DISTRIBUTIONS OF DEUTERONS FROM THE REACTION $\text{D} + \text{D} \rightarrow \text{p} + \text{n} + \text{d}$.**

S.B. Sakuta, N. Burtebaev, S.V. Artemov, R. Yarmukhamedov. **COUPLED CHANNELS EFFECTS IN THE d , ^3He AND α -PARTICLES SCATTERING ON ^6Li NUCLEI.**

Section III

Theory of atomic nucleus and fundamental interactions

Oral Session

15:30

M.L. Gorelik, M.H. Urin. **ON DISTRIBUTION OF THE ISOSCALAR MONOPOLE STRENGTH IN MEDIUM-HEAVY SPHERICAL NUCLEI.**

G.K. Nie. **RADII OF LAST PROTON POSITION IN SYMMETRICAL NUCLEI.**

A.D. Efimov, V.M. Mikhajlov. **MICROSCOPICAL CALCULATIONS OF E2 EFFECTIVE CHARGES FOR IBM**

Joint talk:

P.N.Usmanov, A.I.Vdovin, U.S.Salihbaev, A.Urinov. **THE ANALYSIS OF THE MIXED TRANSITIONS IN ^{160}Dy .**

P.N.Usmanov, A.I.Vdovin, A.A.Solnyshkin, U.S.Salihbaev. **PROPERTIES OCTUPOLE STATES IN ^{160}Dy .**

Reporter P.N.Usmanov

A.N. Kuzmina, G.G. Adamian, N.V. Antonenko. **ROLE OF QUASIPARTICLE STRUCTURE IN ALPHA DECAYS OF THE HEAVIEST NUCLEI.**

P.M. Krassovitskiy, A.A. Gusev, S.I. Vinitzky, O. Chuluunbaatar. **QUANTUM TRANSPARENCY OF BARRIERS IN RESONANCE TUNNELING OF COUPLED PAIR OF PARTICLES OR IONS.**

A.V. Glushkov. **MUON- γ -NUCLEAR SPECTROSCOPY: DISCHARGE OF METASTABLE NUCLEI DURING μ^- CAPTURE.**

F.F. Karpeshin, M.B. Trzhaskovskaya. **RESONANCE EXCITATION OF THE NUCLEAR ISOMER VIA RESONANCE CONVERSION IN THE IONS OF Th-229.**

Yu.I. Sorokin. **HEISENBERG TRANSFORMATION AND BORN APPROXIMATION IN PROBLEM SHAKING OF ATOMIC ELECTRONS UNDER BETA DECAY.**

A.A. Kurteva. **BETA-DECAY $^{229}\text{U} \rightarrow ^{229}\text{Pa}$.**

K.N. Gusev for the GERDA collaboration. **THE SEARCH FOR NEUTRINOLESS DOUBLE BETA DECAY WITH THE GERDA EXPERIMENT.**

JUNE, 27 (Wednesday)

Semiplenary session I

9:00

9:00 – 9:30: V.G.Nedorezov (Moscow, INR RAS) **POLARIZATION EXPERIMENTS WITH BACK SCATTERED GAMMA BEAMS**

9:35 – 10:05: V.E. Bunakov (Gatchina, PNPI). **ON THE ENHANCEMENT OF THE FUNDAMENTAL SYMMETRY BREAKING EFFECTS**

10:10 – 10:40: S.G. Kadmsky (Voronezh, VSU), V.E. Bunakov, L.V. Titova **T-ODD CORRELATIONS AND T-INVARIANCE IN NUCLEAR REACTIONS AND FISSION**

10:45 – 11:15: V.V. Samarin (Dubna, JINR) **APPLICATION OF TWO-CENTER STATES AT THE DESCRIPTION OF NUCLEON TRANSFERS PROCESSES BY A COUPLED CHANNEL METHOD**

11:20 – 11:40: *Coffee break*

11:40 – 12:10: B.A. Zon (Voronezh, VSU) **RELATIVE MAGNITUDE OF CROSS SECTIONS FOR ELASTIC AND INELASTIC SCATTERING OF A FAST PARTICLE ON A MANY-PARTICLE TARGET**

12:15 – 12:45: A.P. Kobzev (Dubna, JINR), V.M. Vahtel, V.A. Rabotkin **ANALYTICAL CAPABILITIES OF NUCLEAR-PHYSICAL TECHNIQUES**

12:50 – 13:20: I.V. Kopytin, A.S. Kornev (Voronezh, VSU) **QUASI-CLASSICAL FORMULA FOR ALPHA DECAY RATE IN ELECTROMAGNETIC FIELD**

13:25 – 13:55:

14:00 – 15:30 – *Lunch*

Semiplenary session II

9:00

9:00 – 9:30: M. Binderbauer, H. Guo, D. Barns, S. Putvinski, N. Rostoker, M. Tuszewski, M. Anderson, V. Bystritskii, E. Garate, F. Giamanco, E. Ruskov, A. VanDrie. **FRC ON THE ROAD TO CONTROLLED THERMONUCLEAR FUSION. PROBLEMS AND PROMISE.**

9:35 – 10:05: Joint talk:

A.S. Demyanova, T.L. Belyaeva, S.A. Goncharov, A.A. Ogloblin. NEUTRON HALO ROTATION IN ^{11}Be and ^9Be .

A.S. Demyanova, A.A. Ogloblin, T.L. Belyaeva, N. Burtebaev, S.A. Goncharov, Yu.B. Gurov, A.N. Danilov, S.V. Dmitriev, Yu.G. Sobolev, W. Trzaska, G.P. Tyurin, P. Heikkinen, S.V. Khlebnikov, R. Julin. DOES THE HOYLE STATE IN ^{12}C ROTATE?

A.A. Ogloblin, T.L. Belyaeva, A.S. Demyanova, S.A. Goncharov. MEASURING THE RADII OF NUCLEAR EXCITED STATES WITH RADIOACTIVE BEAMS.

10:10 – 10:40: V.V. Tokarevsky (Ukraine, Chernobyl', The institute of Chernobyl' problems) NUCLEAR TRANSMUTATIONS: STATE-OF-THE-ART, CHALLENGES AND PERSPECTIVES

10:45 – 11:15: S.P. Kamerdzhiy (Obninsk, Physics and Power Engineering Institute), O.I. Achakovskiy, D.A. Voitenkov. SELF-CONSISTENT APPROACHES IN MICROSCOPIC NUCLEAR THEORY. STATIC MOMENTS OF ODD-ODD NUCLEI

11:20 – 11:40: *Coffee break*

11:40 – 12:10: A.A. Smolnikov (Dubna, JINR) NEW GENERATION OF EXPERIMENTS SEARCHING FOR NEUTRINOLESS DOUBLE BETA DECAY

12:15 – 12:45: A.G. Kadenskii (Korolev, TSNIIMASH) PROBLEMS OF FORECASTING RADIATING FIRMNESS AND PARAMETRICAL RELIABILITY OF ELEMENT COMPLETING BASE FOR SPACE VEHICLE EQUIPMENT

12:50 – 13:20: M.Yu. Barabanov (Moscow, JINR), A.S. Vodopyanov, PERSPECTIVES OF THE STUDY OF CHARMONIUM AND CHARMED HYBRIDS IN EXPERIMENTS USING ANTI-PROTON BEAM WITH MOMENTUM RANGING FROM 1 TO 15 GeV/c

13:25 – 13:55: Joint talk:

V.K. Lukyanov, E.V. Zemlyanaya, K.V. Lukyanov, Ali El Lithi, Ibrahim Abdulmagead, B. Slowinski. ANALYSIS OF THE PION-NUCLEUS ELASTIC SCATTERING USING THE MICROSCOPIC OPTICAL POTENTIAL.

V.K. Lukyanov, E.V. Zemlyanaya, K.V. Lukyanov, E.I. Zhabitskaya, M.V. Zhabitsky. A MODELING OF THE PION-NUCLEUS MICROSCOPIC OPTICAL POTENTIAL AT ENERGIES OF 33-RESONANCE AND IN-MEDIUM EFFECT ON THE PION-NUCLEON AMPLITUDE OF SCATTERING.

14:00 – 15:30 – *Lunch*

JUNE, 27 (Wednesday)

Section III

Theory of atomic nucleus and fundamental interactions

Oral Session

15:30

Joint talk:

I.V. Kopytin, T.A. Krylovetskaya, Imad A. Hussain. **ROLE OF ENDOTHERMIC BETA DECAYS IN ABUNDANCE FORMING PROCESSES OF ^{113}In AND ^{115}Sn NUCLEI.**

I.V.Kopytin, T.A.Krylovetskaya, Imad A. Hussain. **THERMAL BETA DECAY AND PROBLEM OF P -NUCLEI ^{113}In AND ^{115}Sn .**

Reporter Imad A. Hussain

M.Ya. Safin. **ON P - AND T -SYMMETRIES VIOLATION IN POLARIZED NEUTRINO-PROTON ELASTIC SCATTERING.**

O.Yu. Khetselius. **WEAK INTERACTION AND PARITY NONCONSERVATION EFFECT IN HEAVY FINITE FERMI-SYSTEMS: RELATIVISTIC NUCLEAR MANY-BODY THEORY.**

Yu.I. Romanov. **THE DESCRIPTION OF THE WEAK LEPTONIC PROCESSES ON THE BASIS OF THE CURRENTS WITH THE COMPLEX COUPLING CONSTANTS.**

A.K. Vlasnikov, V.M. Mikhajlov. **EXTENSION OF EQUATIONS-OF-MOTION METHOD TO THE MULTILEVEL SYSTEMS WITH PAIRING.**

Joint talk:

A.A. Okhunov, Ph.N. Usmanov, H. Abu Kassim. **PROPERTIES OF ROTATIONAL BAND STATES WITH $K\pi \leq 2^+$ IN $^{170,172,174}\text{Yb}$ ISOTOPES.**

Ph.N. Usmanov, A.A. Okhunov and H. Abu Kassim, **THE MIXTURE OF ROTATIONAL BAND STATES WITH $K\pi \leq 2^+$ IN $^{170,172,174}\text{Yb}$ ISOTOPES**

Ph.N.Usmanov, A.A.Okhunov and H. Abu Kassim **INFLUENCE OF 1^+ STATES ON THE g_R -FACTORS OF GROUND-STATE BAND IN ^{160}Dy AND $^{170,174}\text{Yb}$ ISOTOPES**

Reporter: A.A.Okhunov

V.M. Kartashov. **NON-STATIONARY PROCESSES IN RADIOACTIVE OXIDES WITH DYNAMIC POLARIZATION AS POSSIBLE EXHIBITING OF DISCRETE SYMMETRY VIOLATIONS.**

Section IV
Nuclear reactions theory
Oral Session
15:30

B.A. Tulupov, M.H. Urin. **ON THE DIRECT AND SEMIDIRECT RADIATIVE CAPTURE OF NEUTRONS BY MEDIUM-HEAVY NUCLEI.**

R.A. Kuzyakin, V.V. Sargsyan, G.G. Adamian, N.V. Antonenko, E.E. Saperstein, S.V. Tolokonnikov. **ISOTOPIC TRENDS OF CAPTURE CROSS SECTION AND MEAN-SQUARE ANGULAR MOMENTUM OF CAPTURED SYSTEM.**

Joint Talk:

S.G. Kadmsky, L.V. Titova **P-ODD ASYMMETRIES FOR PRODUCTS OF SPONTANEOUS FISSION OF ORIENTED NUCLEI**

S.G. Kadmsky, L.V. Titova **T-ODD ASYMMETRIES FOR THE REACTION OF TERNARY SPONTANEOUS FISSION OF ORIENTED NUCLEI**

S.G. Kadmsky, L.V. Titova, V.E. Bunakov **THE P-ODD ASYMMETRIES FOR THE REACTIONS OF BINARY FISSION OF ORIENTED TARGET-NUCLEI BY COLD POLARIZED NEUTRONS**

N.E. Aktaev, I.I. Gontchar. **INFLUENCE OF THE POTENTIAL BARRIER HEIGHT ON THE RATE OF THE THERMAL DECAY OF THE METASTABLE STATE.**

V.A. Rachkov, A. Adel, A.V. Karpov, A.S. Denikin, V.I. Zagrebaev. **EFFECT OF NEUTRON TRANSFER IN FUSION REACTIONS WITH WEAKLY BOUND NUCLEI AT SUB-BURRIER ENERGY.**

Section V
Technique and methods of experiment and applications of nuclear-physical methods
Oral Session
15:30

Joint talk:

I.S. Batkin, M.A. Dolgoplov, I.V. Kopytin. **ENHANCEMENT OF DOSE FIELD DURING RADIATIVE EXPOSURE OF HETEROGENEOUS BIOLOGICAL SUBSTANCE WITH NANOPARTICLES.**

I.S. Batkin, M.A. Dolgoplov, I.V. Kopytin. **TRANSFORMATION OF HARD X-RAYS IRRADIATION INTO CHARACTERISTIC IRRADIATION IN BIOLOGICAL SUBSTANCE WITH HEAVY NANOPARTICLES.**

Reporter M.A. Dolgoplov

Joint talk:

A.N. Almaliev, I.S. Batkin, M.A. Dolgoplov, I.V. Kopytin, P.V. Lukin, T.A. Churakova. **ACOUSTIC PRESSURE TEMPERATURE DEPENDENCE OF HEAVY CHARGED PARTICLE RADIATION MOVING IN CONDENSED MEDIUM.**

A.N. Almaliev, I.S. Batkin, M.A. Dolgoplov, I.V. Kopytin, P.V. Lukin, T.A. Churakova. **POSSIBLE MECHANISM OF ABSORBED RADIATION DOSE ADJUSTMENT AT PROTON RADIATION THERAPY.**

Reporter P.V. Lukin

A.V. Belousov, A.S. Osipov, A.P. Chernyaev. **INFLUENCE OF PHOTONUCLEAR REACTIONS PRODUCTS ON BIOLOGICAL EFFICIENCY OF PHOTON AT THE THIN LAYERS IRRADIATION.**

G.A. Abdullaeva, Yu.N. Koblik, G.A. Kulabdullaev, K. Belasarov, Sh. Saytjanov. **DETERMINATION OF KERMA IN BIOLOGICAL TISSUE IRRADIATED BY NEUTRON BEAM OF WWR-SM REACTOR.**

A.V. Lubashevskiy on the behalf of the GERDA collaboration. **INVESTIGATIONS AND DEVELOPMENT OF THE SUPPRESSION METHODS OF THE BACKGROUND IN THE LArGe LOW-BACKGROUND TEST FACILITY FOR THE GERDA EXPERIMENT.**

E.A. Yakushev, V.B. Brudanin, D.V. Filosofov, A.V. Lubashevskiy, S.V. Rozov, S.S. Semikh. **RADON IN LSM UNDERGROUND LABORATORY.**

N.G. Chechenin, T.V. Chuvilskaya, A.G. Kadmenskii, A.A. Shirokova. **NUCLEAR REACTIONS ON Si AND Al INDUCED BY COSMIC PROTONS AND α -PARTICLES.**

V.R. Gitlin, **RADIATION-TECHNOLOGICAL PROCESSES BASED ON LOW-ENERGY RADIATION IN PRODUCTION OF PRODUCTS WITH STRUCTURE "METAL-OXIDE-SEMICONDUCTOR"**

E.N. Voronina, L.S. Novikov. **MATHEMATICAL SIMULATION OF RADIATION IMPACT ON NANOSTRUCTURES.**

V.K. Grishin, A.A. Kuznetsov, K.A. Stopani. **SIMULATION OF A RADIATION SHIELDING FOR THE MANNED MARS MISSION**

Joint talk:

N.P. Dikiy, A.N. Dovbnya, E.P. Medvedeva, D.V. Medvedev, D.S. Bakay, Yu.V. Lyashko, V.L. Uvarov, I.D. Fedorets, N.P. Khlapova, **PHOTOACTIVATION INFLUENCE ON CATALYTIC CHARACTERISTICS OF ZNO NANOPARTICLES DURING CONVERSION OF METHANOL;**

N.P. Dikiy, A.N. Dovbnya, M.A. Dolzhek, Yu.V. Lyashko, E.P. Medvedeva, D.V. Medvedev, **PHOTONUCLEAR METHOD OF CU-67 MANUFACTURE FOR NUCLEAR MEDICINE.**

Repreter: N.P. Dikiy.

JUNE, 27 (Wednesday)

Poster Session

18:00

JUNE, 28 (Thursday)

Section II

Experimental investigations of nuclear reactions mechanisms

Oral Session

9:00

A.S. Demyanova, A.A. Ogloblin, T.L. Belyaeva, N. Burtebaev, S.A. Goncharov, Yu.B. Gurov, A.N. Danilov, S.V. Dmitriev, Yu.G. Sobolev, W. Trzaska, G.P. Tyurin, P. Heikkinen, S.V. Khlebnikov, R. Julin. **CLUSTER STATES OF ^{11}B WITH ABNORMALLY LARGE RADII.**

Yu.A. Gloukhov, A.A. Ogloblin, S.A. Goncharov, A.S. Dem'yanova. **INELASTIC SCATTERING WITH EXCITATION OF LOWER DENSITY HOYLE STATE.**

B.V. Zhuravlev, N.N. Titarenko, V.I. Trykova. **NEUTRON EMISSION MECHANISMS IN $^{56}\text{Fe}(\alpha, xn)$ REACTION.**

Joint talk:

N.K. Skobelev, A.A. Kulko, Y.E. Penionzhkevich, E.I. Voskoboynik, V. Kroha, V. Burjan, Z. Hons, J. Mrázek, Š. Piskoř, E. Šimečkova. **CROSS SECTIONS FOR ISOTOPES ^{43}Sc AND ^{46}Sc IN THE $^{45}\text{Sc}+^3\text{He}$ REACTION.**

N.K. Skobelev, Y.E. Penionzhkevich, A.A. Kulko, A.S. Fomichev, N.A.

Demehina, S.M. Lukyanov, J.G. Sobolev, V.A. Maslov, E.I. Voskoboynik, V. Kroha, A. Kugler, J. Mrazek. **STUDY OF FUSION AND NUCLEON TRANSFER CHANNELS FOR THE REACTION $^{197}\text{Au} + ^6\text{He}$ AT ^6He ENERGIES UP TO 20 MeV/A.**

Reporter N.K. Skobelev

N.A. Demekhina, N.K. Skobelev, Yu.E. Penionzhkevich, T.V. Chuvilskaya, A.A. Shirokova. **FUSION AND TRANSFER NUCLEAR REACTIONS IN THE INTERACTION OF ^6He WITH ^{197}Au .**

B.M. Abramov, P.N. Alexeev, Yu.A. Borodin, S.A. Bulychjov, I.A. Dukhovskoy, A.P. Krutenkova, V.V. Kulikov, M.A. Martemianov, M.A. Matsyuk, E.N. Turdakina, A.I. Khanov. **FRAGMENTATION OF CARBON IONS AT INTERMEDIATE ENERGIES.**

Ya.A. Berdnikov, D.A. Ivanishchev, D.O. Kotov, V.G. Riabov, Yu.G. Riabov, V.M. Samsonov. **ELECTROMAGNETIC AND HADRONIC SIGNATURES OF QUARK-GLUON PLASMA IN HEAVY-ION COLLISIONS AT 62.4 GeV IN PHENIX EXPERIMENT AT RHIC.**

Ya.A. Berdnikov, V.A. Rebyakova. **J/ ψ -MESON DETECTION POSSIBILITY IN ULTRAPERIPHERAL Pb-Pb COLLISIONS AT $\sqrt{s}=2.76$ TeV.**

A.Ya. Berdnikov, D.A. Ivanishchev, D.O. Kotov, V.G. Riabov, Yu.G. Riabov, V.M. Samsonov. **DIELECTRON MEASUREMENTS IN HEAVY ION COLLISIONS AT 200 GeV IN PHENIX EXPERIMENT AT RHIC.**

B.A. Chernyshev, Yu.B. Gurov, L.Yu. Korotkova, S.V. Lapushkin, R.V. Pritula, T.D. Schurenkova. **A-DEPENDENCE OF THE YIELDS OF THE DEUTERONS EMITTED IN STOPPED PION ABSORPTION.**

L.M. Barkov, V.V. Gauzshtein, V.F. Dmitriev, R.R. Dusaev, A.Yu. Loginov, S.I. Mishnev, D.M. Nikolenko, I.A. Rachek, R.Sh. Sadikov, A.A. Sidorov, V.N. Stibunov, D.K. Toporkov, Yu.V. Shestakov, S.A. Zevakov. **MEASUREMENT OF THE EXCLUSIVE REACTION OF THE NEGATIVE PION PHOTOPRODUCTION ON POLARIZED DEUTERONS IN THE REGION OF THE LARGE VALUES OF THE FINAL PROTON MOMENTA.**

Joint talk:

V.D. Burkert, V.V. Chesnokov, L. Elouadrhiri, B.S. Ishkhanov, V.I. Mokeev, M.E. Stepanov, V.V. Varlamov. **CLAS COLLABORATION DATA BASE ON PHOTO- AND ELECTROPRODUCTION OF MESONS ON NUCLEONS AND NUCLEI.**

V.V. Chesnokov, B.S. Ishkhanov, V.I. Mokeev³, M.E. Stepanov, V.V. Varlamov.
**CONTRIBUTIONS FROM EXCLUSIVE MESON
ELECTROPRODUCTION CHANNELS TO THE INCLUSIVE
STRUCTURE FUNCTIONS F_1 AND F_2 FROM THE CLAS PHYSICS
DATABASE.**

Reporter V.V. Chesnokov

S.S. Belyshev, A.N. Ermakov, A.S. Kurilik, A.A. Kuznetsov, K.A. Stopani.
PHOTONUCLEAR REACTIONS ON PALLADIUM ISOTOPES.

Section IV
Nuclear reactions theory
Oral Session
9:00

V.E. Bunakov, G.M. Gindin. **DIFFUSION COEFFICIENTS IN HEAVY-ION REACTIONS WITH DEEP INELASTIC NUCLEON TRANSFER.**

S.G. Kadmsky, L.V. Titova **YIELDS AND ANGULAR AND ENERGY DISTRIBUTIONS OF THE LIGHT PARTICLES IN TRUE QUATERNARY FISSION**

S.G. Kadmsky, V.E. Bunakov, S.S. Kadmsky **TRANSITION FISSION STATES FOR HEATED NUCLEI**

A.T. D'yachenko, K.A. Gridnev. **CALCULATION SCHEME OF HEAVY-ION COLLISIONS WITHIN THE FRAMEWORK OF A MODIFIED HYDRODYNAMIC APPROACH.**

V.E. Pafomov, V.A. Sergeev, V.P. Zavarzina. **THE RELATIONS BETWEEN THE DIFFERENTIAL CROSS SECTIONS FOR DIFFRACTIVE PROCESSES OF HALO-NUCLEUS CORE STRIPPING AND NUCLEON STRIPPING.**

Yu.S. Lutostansky, V.I. Lyashuk , I.V. Panov. **CALCULATION OF TRANSURANIUM ELEMENTS YIELDS UNDER CONDITIONS OF NEUTRON PULSE.**

E.E. Lin. **CLUSTER MODEL OF FORMATION OF SUBNUCLEAR AND SUBATOMIC OBJECTS.**

Section V
Technique and methods of experiment and applications of nuclear-physical methods
Oral Session
9:00

A.G. Kadmskii. **NON BOGOLUBOV CONFUSING OF SWIFT CHARGED PARTICLES IN A CRYSTAL. ANTICHANNELING.**

V.I. Grafutin, O.V. Ilyukhina, E.P. Prokopev. **RESEARCH BY METHOD POSITRON ANNIHILATION SPECTROSCOPY OF CONDENSED MATTER WITH ITS OWN RADIATION.**

V.M. Lebedev, V.T. Lebedev, S.P. Orlov. **STUDYING OF SUPRA-ATOMIC STRUCTURE OF THE REACTOR IRRADIATION ALUMINIUM ALLOYS BY SMALL-ANGLE NEUTRON SCATTERING TECHNIQUE.**

A.A. Bezbakh, S.A. Baraeva, A.S. Fomichev, W. Dominik, M.S. Golovkov, A.V. Gorshkov, L.V. Grigorenko, V. Chudoba, Z. Janas, G. Kaminski, S.A. Krupko, C. Mazzochi, S. Mianowski, M. Pfützner, M. Pomorski, S.I. Sidorchuk, R.S. Slepnev, G.M. Ter-Akopian, R. Wolski. **NEW OTPC DETECTOR AT THE ACCULINNA SEPARATOR.**

Joint talk:

A.A. Sushko. **DETECTION OF LOW-INTENSITY GAMMA-NEUTRON FLUXES FROM STATIC AND DYNAMIC MULTIPLYING SYSTEMS BY POLYSTYRENE-BASED SCINTILLATION DETECTORS.**

A.A. Sushko, A.N. Babaikin, I.A. Ivanin, V.N. Yanovsky. **A NEUTRINO DETECTOR AT THE BIGR PULSED REACTOR.**

Reporter A.A. Sushko

Joint talk:

N.I. Rukhadze, V.B. Brudanin, Ch. Briancon, P. Čermák, O.I. Kochetov, F. Mamedov, P. Loaiza, F. Piquemal, E.N. Rukhadze, I. Štekl, G. Warot, E.A. Yakushev, M. Zampaolo. **HIGH EFFICIENCY HPGE γ -SPECTROMETER FOR THE INVESTIGATIONS OF $\beta\beta$ DECAY TO EXCITED STATES.**

N.I. Rukhadze, V.B. Brudanin, P. Čermák, J. Čermák, J.M. Jose, V. Král, F. Mamedov, S.V. Rozov, E.N. Rukhadze, A.V. Salamatin, Yu.A. Shitov, I. Štekl, E.A. Yakushev. **USING OF PIXEL DETECTORS IN INVESTIGATIONS OF EC/EC DECAY.**

Reporter N.I. Rukhadze

S.V. Rozov, D. Borowicz, V.B. Brudanin, D.V. Filosofov, Yu.B. Gurov, V.G. Sandukovskiy, S.S. Semikh, E.A. Yakushev. **DEVELOPMENT OF LOW ENERGY THRESHOLD HPGe DETECTORS IN JINR.**

E.S. Konobeevski, M.V. Mordovskoy, S.I. Potashev, I.M. Sharapov, S.V. Zuyev. **THE NEUTRON BEAM SPECTROMETER BASED ON SCINTILLATION DETECTOR WITH n- γ PULSE SHAPE DISCRIMINATION.**

Yu.M. Burmistrov, E.S. Konobeevski, M.V. Mordovskoy, S.I. Potashev, I.M. Sharapov, S.V. Zuyev. **THE SETUP FOR STUDYING QUASIFREE nn SCATTERING IN ENERGY RANGE OF 20-60 MeV.**

S.S. Verbitsky, A.M. Lapik, A.V. Rusakov, A.N. Tselebrovsky. **NEUTRON DETECTION USING DOUBLE-SCATTERING METHOD.**

R.A. Sadykov, A.A. Alekseev, V.S. Litvin, E.S. Clementyev, S.N. Axenov, D.N. Trunov, A.S. Kononyhin, S.F. Sidorkin, Y.V. Ryabov, M.I. Grachev, V.A. Fedchenko, A.P. Artyushin, V.K. Gorbunov, E.V. Ponomareva, V.A. Kutuzov, A.V. Feshenko, V.L. Serov, S.P. Kuznetsov, I.V. Meshkov, Yu.A. Lapushkin, P.A. Alekseev, A.P. Bulkin, V.A. Ulianov, V.A. Trunov, E.A. Koptelov, L.V. Kravchuk. **THE NEUTRON SCATTERING INSTALLATIONS COMPLEX FOR CONDENSED MATTER RESEARCH AND NANO-DIAGNOSTICS BASED ON THE PULSED SPALLATION NEUTRON SOURCES RADEX AND IN-06 AT INR RAS.**

Joint talk:

V.A. Skvortsov, N.I. Vogel. **ABOUT GENERATION OF STRONGLY DIRECTED COHERENT NEUTRON RADIATION.**

V.A. Skvortsov, N.I. Vogel. **PHYSICS OF NUCLEAR ACTIVATION OF METALLIC TARGETS BY LASER RADIATION.**

Reporter V.A. Skvortsov

Yu.S. Lutostansky, V.I. Lyashuk. **POWERFUL ANTINEUTRINO SOURCE ON THE BASE OF ACCELERATOR AND LITHIUM CONVERTER.**

D.O. Spirin, Ya.A. Berdnikov. **THE DUAL-ENERGY METHOD IN X-RAY CT.**

14:00 – 15:30 – *Lunch*

Sections VII, VI

Experience and problems of qualitative training of Russian and foreign specialists in field of nuclear physics, atomic power engineering and nuclear technologies

Fundamental problems of nuclear power and nuclear technologies

Oral Session

9:00

V.M. Lebedev, V.A. Smolin. **INVESTIGATION OF ELEMENT COMPOSITION OF THE DUST ON THE GLOBUS-M TOKAMAK.**

I.N. Izosimov. **DECAY SCHEMES COMPLETENESS AND DECAY HEAT CALCULATION PROBLEMS.**

V.V. Varlamov, S.Yu. Komarov, N.N. Peskov, M.E. Stepanov. **ATOMIC NUCLEI GROUND AND ISOMER STATES PARAMETERS DATABASE FOR SCIENCE RESEARCH AND EDUCATION.**

E. Käbin. "NUCLEAR PHYSICS IN INTERNET" - THE EXPERIENCE OF USING INTERNET TECHNOLOGIES IN EDUCATION.

M.I.Panasyuk, V.V.Radchenko, E.V.Shirokov. THE EDUCATIONAL ABILITIES OF MSU NUCLEAR PHYSICS INSTITUTE AND NUCLEAR PHYSICS DEPARTMENT OF PHYSICS FACULTY

14:00 – 15:30 – *Lunch*

JUNE, 29 (Friday)

Plenary session III

9:00

9:00 – 9:30: A.P. Chernyaev (Moscow, MSU), A.V. Belousov, A.S. Osipov, S.M. Varzar. **ACCELERATORS IN THE WORLD TODAY**

9:35 – 10:05: P.I. Zarubin (Dubna, JINR) **CLUSTER STRUCTURE OF LIGHT RADIOACTIVE NUCLEI IN PROCESSES OF RELATIVISTIC FRAGMENTATION**

10:10 – 10:40: O. Povoroznyk (Kiev, Institute of Nuclear Research, Academy of Sciences of Ukraine), O.Gorpinich, **STUDY OF EXCITATION SPECTRA BY PARTICLE-DECAY SPECTROSCOPY**

10:45 – 11:15: Yu.L. Ratis (Samara, Institute of Energy Special Purpose) **NEUTRINO CATALYSIS OF NUCLEAR FUSION IN COLD HYDROGEN**

11:20 – 11:40: *Coffee break*

11:40 – 12:10: S.Yu. Igashov, Yu.M. Tchuvil'sky (Moscow, SINP MSU) **ALPHA-DECAY IN THE ELECTRONIC SURROUNDING**

12:15 – 12:45: E.S. Konobeevski (Moscow, INR RAS), M.V. Mordovskoy, S.I. Potashev, I.M. Sharapov, S.V. Zuyev. *nd* **BREAKUP REACTION AS A TOOL FOR STUDYING NEUTRON-NEUTRON INTERACTION**

12:50 – 13:20: V.V. VARLAMOV, B.S. ISHKHANOV, V.N. ORLIN, N.N. PESKOV, M.E. STEPANOV. **NEW DATA ON PARTIAL PHOTONEUTRON REACTIONS (γ,n), ($\gamma,2n$) AND ($\gamma,3n$)**

13:25 – 13:55:

14:00 – 15:30 – *Lunch*

JUNE, 27 (Wednesday)

Poster Session

Section I

Experimental investigations of atomic nucleus properties

O.V. Beshpalova, E.A. Romanovsky, T.I. Spasskaya. **EVALUATED OCCUPATION PROBABILITIES OF SINGLE-PARTICLE ORBITS IN MEDIUM RANGE NUCLEI.**

O.V. Beshpalova, T.A.Ermakova, A.A.Klimochkina, E.A. Romanovsky, T.I. Spasskaya. **PROTON SHELL EVOLUTION OF NUCLEI WITH $20 \leq Z \leq 28$ AND $20 \leq N \leq 50$ AND DISPERSIVE OPTICAL MODEL.**

Yu.L. Khazov, A.A. Rodionov. **EVALUATION OF NUCLEAR STRUCTURE AND DECAY DATA FOR A=146 MASS CHAIN.**

A.P. Lashko, T.N. Lashko. **THE GAMMA-RAY INTENSITIES FROM THE ^{177m}Lu DECAY.**

A.P. Lashko, T.N. Lashko. **PRECISE MEASUREMENT OF THE GAMMA-RAY ENERGIES FROM THE ^{175}Hf DECAY.**

V.A.Morozov, N.V.Morozova. **DETERMINATION OF THE PRECISE VALUE OF HALF LIFE OF ^{212}Po .**

Section II

Experimental investigations of nuclear reactions mechanisms

S.N. Abramovich, S.M. Taova. **EFFECT OF ELECTRON SCREENING IN THE MAIN THERMONUCLEAR REACTIONS**

V.V. Gauzshtein, R.R. Dusaev, A.Yu. Loginov, D.M. Nikolenko, I.A. Rachek, R.Sh. Sadikov, A.A. Sidorov, V.N. Stibunov, D.K. Toporkov, Yu.V. Shestakov, S.A. Zevakov. **MEASUREMENT OF THE TENSOR ANALYSING POWER COMPONENTS OF THE NEGATIVE PION PHOTOPRODUCTION ON DEUTERONS.**

D.V. Kamanin, Yu.V. Pyatkov, A.A. Alexandrov, I.A. Alexandrova, N.A. Kondratjev, E.A. Kuznetsova, V.E. Zhuchko. **SOME EXPERIMENTAL MANIFESTATIONS OF NEW TERNARY CLUSTER DECAY OF HEAVY NUCLEI.**

D.D.Zaikin, M.V.Mordovskoy, I.V.Surkova. **DIFFUSENESS PARAMETER FOR EVEN-EVEN NUCLEI WITH $58 \leq A \leq 250$ AND THE COUPLED CHANNEL OPTICAL MODEL.**

S.R. Palvanov, G.S. Palvanova, M. Kajumov, O. Juraev. **EXCITATION OF ISOMERIC STATES IN REACTIONS (γ, n) AND $(n, 2n)$ ON ^{113}In AND ^{198}Hg NUCLEI.**

S.R. Palvanov, G.S. Palvanova. **ISOMERIC YIELD RATIOS AND CROSS SECTION RATIOS OF THE REACTION $(\gamma, 2n)$ ON ^{89}Y , ^{113}In AND ^{197}Au NUCLEI.**

O.A. Parlag, T.V. Havrilec, A.I. Lendyel, V.T. Maslyuk. **MASS DISTRIBUTION OF THE ^{241}Am PHOTOFISSION FRAGMENTS.**

O.A. Parlag, T.V. Havrilec, A.I. Lendyel, V.T. Maslyuk. **MASS DISTRIBUTION STRUCTURE OF THE ^{238}U PHOTOFISSION.**

O.A. Parlag, T.V. Havrilec, A.I. Lendyel, V.T. Maslyuk. **PROMPT NEUTRON MULTIPLICITY PARAMETERIZATION OF ACTINIDE NUCLEI PHOTOFISSION.**

L.M. Barkov, V.V. Gauzshtein, V.F. Dmitriev, R.R. Dusaev, A.Yu. Loginov, S.I. Mishnev, D.M. Nikolenko, I.A. Rachek, R.Sh. Sadikov, A.A. Sidorov, V.N. Stibunov, D.K. Toporkov, Yu.V. Shestakov, S.A. Zevakov. **MEASUREMENT OF THE DIFFERENTIAL CROSS SECTIONS OF THE NEGATIVE PION PHOTOPRODUCTION ON DEUTERON AT LARGE PROTON MOMENTA.**

N.S. Rumyantseva, V.G. Egorov. **MUON CAPTURE IN ^{12}C .**

Section III

Theory of atomic nucleus and fundamental interactions

A.V. Glushkov. **RESONANCE STATES OF COMPOUND SUPER-HEAVY NUCLEUS AND EPPP IN HEAVY NUCLEUS COLLISIONS.**

O.Yu. Khetselius. **RELATIVISTIC ENERGY APPROACH TO COOPERATIVE ELECTRON- γ -NUCLEAR PROCESSES: NEET EFFECT.**

V.S. Kinchakov. **THE BRINK MODEL WITH TETRAHEDRAL ALPHA-CLUSTERS FOR THE THREE-BODY FORCES.**

A.M. Nurmukhamedov. ABOUT VALIDITY OF USE OF STUDENT'S t -CRITERION FOR EXPERIMENTAL PROOF OF RESTORATION OF WIGNER'S $SU(4)$ SPIN-ISOSPIN SYMMETRY IN ATOMIC NUCLEI.

A.M. Nurmukhamedov. ABNORMAL VALUES OF EMPIRIC FUNCTION $b(A)$ OF THE MASS FORMULA OF WIGNER IN THE FIELD OF LIGHT NUCLEI.

Yu.V. Orlov, L.I. Nikitina. NUCLEAR VERTEX CONSTANTS AND ASYMPTOTIC NORMALIZATION COEFFICIENTS FOR ${}^8\text{Be}$ RESONANT STATES FROM THE $\alpha\alpha$ SCATTERING EFFECTIVE-RANGE FUNCTION EXPANSION.

I.N. Serga, Yu.V. Dubrovskaya , D.E. Sukharev. SPECTROSCOPY OF THE HADRONIC ATOMS AND SUPERHEAVY ISOTOPES: ENERGY SHIFTS AND WIDTHS AND STRONG K , π -N INTERACTION CORRECTION.

E.T. Ibraeva, O. Imambekov, I. Tleulessova. THE ANALYSIS OF STRUCTURE OF ${}^6\text{He}$ AND ${}^8\text{He}$ NUCLEI.

S.Yu. Torilov, K.A. Gridnev, T.V. Korovitskaya. CLUSTER STATES IN THE NEUTRON EXCESS NUCLEI.

Section IV

Nuclear reactions theory

L.D. Blokhintsev, D.A. Savin. EFFECTIVE RANGE EXPANSION AND VERTEX CONSTANTS FOR ${}^6\text{Li}$

M.A. Zhusupov, E.T. Ibraeva, A.L. Koslovsky, B.A. Prmantaeva, A.M. Zhigalova. SHELL STRUCTURE EFFECTS OF NUCLEI IN $p^{15}\text{C}$ AND $p^{15}\text{N}$ SCATTERING IN DIFFRACTION THEORY

R.S. Kabatayeva, O.A. Rubtsova, V.I. Kukulín. DYNAMIC POLARIZATION OF ${}^{6,7}\text{Li}$ NUCLEI IN α -PARTICLE ELASTIC SCATTERING

M.A. Zhusupov, E.T. Ibraeva, R.S. Kabatayeva, S.K. Sakhiyev. ELASTIC SCATTERING OF NEUTRONS ON ${}^7\text{Li}$ NUCLEUS AT LOW ENERGIES

V.I. Kovalchuk. CALCULATION OF SCATTERING LENGTH FOR NUCLEAR THREE-BODY PROBLEM USING HYPERSPHERICAL BASIS

EXPANSIONS

A.V. Plavko, M.S. Onegin, V.I. Kudriashov. **ENERGY DEPENDENCE OF (P-A_y) SPIN OBSERVABLES IN (\bar{p}, p') SCATTERING AND KNOCK-ON EXCHANGE TREATMENT**

A.V. Plavko, M.S. Onegin, V.I. Kudriashov. **EXCHANGE APPROXIMATIONS IN THE CALCULATIONS OF THE (\bar{p}, p') SCATTERING USING THE DWBA 91 AND LEA PROGRAMS AT ENERGIES NEAR 100 MeV**

K.A. Gridnev, N.A. Maltsev, N.V. Leshakova. **THE INFLUENCE OF THE ELASTIC AND INELASTIC CLUSTER TRANSFER ON THE ELASTIC SCATTERING OF $^{16}\text{O}+^{12}\text{C}$ AND $^{16}\text{O}+^{16}\text{O}$.**

S.N. Fadeev, K.A. Gridnev, N.A. Maltsev. **CORE EXCHANGE AND $^{16}\text{O}+^{12}\text{C}$ ELASTIC SCATTERING.**

V.V. Samarin. **FEW-NUCLEON TRANSFERS AND WEAKLY-DISSIPATIVE PROCESSES IN GRAZING-MODEL OF LOW-ENERGY NUCLEAR REACTIONS**

K.V. Samarin. **TIME-DEPENDENT QUANTUM DESCRIPTION OF FEW NUCLEONS TRANSFERS AT NUCLEAR REACTIONS $^{40}\text{Ca} + ^{96}\text{Zr}, ^{40}\text{Ca} + ^{208}\text{Pb}, ^{90}\text{Zr} + ^{208}\text{Pb}$**

M.V. Fomina, I.V. Zhitnikov, Y.A. Shitov. **MC ESTIMATION OF DANSS SENSITIVITY TO THE NEUTRINO OSCILLATIONS**

Section V

Technique and methods of experiment and applications of nuclear-physical methods

M.V. Anokhin, V.I. Galkin, A.E. Dubov. **THE STAND FOR TEST VLSI IN THE FIELD, MODELLING RADIATING FIELDS IN SPACE VEHICLES**

V.A. Andrianov, V.P. Gorkov. **SELF-RECOMBINATION AND 2 Δ -PHONON EXCHANGE IN STJ X-RAY DETECTORS**

S.S. Belyshev, L.Z. Dzhilavyan, A.N. Ermakov, B.S. Ishkhanov', V.V. Khankin, A.S. Kurilik, A.A. Kuznetsov, V.I. Shvedunov, K.A. Stopani. **^{18}F PRODUCTION IN THE $^{19}\text{F}(\gamma, n)$ REACTION**

A.N. Ermakov, A.S. Kurilik, K.A. Stopani. **MEASUREMENT OF THE ATOMIC NUMBER BY MEANS OF ELECTRON ACCELERATOR**

V.A. Morozov, N.V. Morozova. **TIME CORRELATION OF THE PMT NOISE IMPULSES**

E.P. Prokopev. **POSSIBLE DEVELOPMENT OF A PROBLEM OF PHYSICS, CHEMISTRY AND TECHNOLOGY OF ANTIMATTER FOR PROJECTS OF SPACESHIPS**

A.V. Salamatin, A.V. Tsvyashchenko, M. Budzynski, A.I. Velichkov, V.N. Trofimov, D.A. Salamatin, A.V. Fedorov, L.N. Fomicheva, G.K. Ryasny, D.V. Karaivanov. **TDPAC SPECTROMETER FOR THE STUDY OF HYPERFINE INTERACTIONS IN A CONDENSED MATTER AT LOW TEMPERATURES AND HIGH PRESSURES**

V.A. Skvortsov. **ON THE THEORY OF NUCLEAR FORCES, ELEMENTARY PARTICLES AND «UNLIMITED» ENERGY CUMULATION**

V.M. Vakhtel, A.M. Khoviv, S.V. Kannykin, V.A. Rabotkin, A.N. Kharin, O.V. Serbin, S.V. Rosnovskiy. **CONVERTERS FOR MÖSSBAUER RESONANCE DETECTORS**

F.F. Valiev. **COLLECTIVE OPTICAL BREMSSTRAHLUNG GENERATED NARROW BEAM OF GAMMA QUANTA**

S.N. Mustafaeva, M.M. Asadov, D.T. Guseinov. **X-RAY SENSITIVITY OF IRON-DOPED CdIn₂S₄ SINGLE CRYSTALS**

M.N. Levin, A.S. Tatarintsev, V.M. Maslovskiy **RADIATION CURRENT TRANSFER IN METAL-DIELECTRIC-SEMICONDUCTOR STRUCTURES**

M.N. Levin, V.R. Gitlin, A.V. Tatarintsev **EDGE EFFECTS IN MOS-STRUCTURES UNDER THE ACTION OF THE LOW-ENERGY RADIATION EXPOSURE**

V.A. Sergienko, A.I. Zippa, V.A. Danilenko. **RADIOECOLOGICAL MEASUREMENTS IN LENINGRAD REGION.**

Section VI

Fundamental problems of nuclear power and nuclear technologies

A. Aleinikov, M. Grigoriev. **MAXIMAL FUEL DEPLETION DEPTH EVALUATION FOR PWR**

O.V. Beshpalova, A.M. Borisov, V.G. Vostrikov, E.A. Romanovsky, N.V. Tkachenko. **NON-DESTRUCTIVE HYDROGEN ANALYSIS BY NUCLEAR PROTON METHOD BACKSCATTERING SPECTROMETRY**

A. Aleinikov, E. Rubashkina. **ABOUT THE SLOW WAVE BURNING REACTOR**

A. Aleinikov, S. Sementsov. **CERMET FUEL REACTOR CORE INVESTIGATION**

V.A. Sergienko, A.I. Zippa, A.O. Myorzlaya, S.V. Tchenmaryov. **SEARCH FOR FUKUSHIMA FALLOUT IN PETERHOF**

M.N. Baev, Yu. Polyakov, S.A. Belov, V.A. Sergienko. **ANTICOINCIDENCE SPECTROMETER FOR CONTROL OF FUEL RODS IN NUCLEAR REACTOR.**

A. Aleinikov, N. Skrinnik. **THE DEVELOPMENT OF PWR REACTORS CONTAINMENT LEAKS DETECTING METHODS**