EXON 2018

SCIENTIFIC PROGRAM	
10.09.2018 Monday	
7-30	*Breakfast*
8-00 - 9-00	*REGISTRATION*
9-00 - 9-10	*OPENING*
9-10 - 9-30	*SCIENTIFIC INVESTIGATIONS IN PETROZAVODSK STATE UNIVERSITY* *A. Voronin*
Chairman	
09-30 - 10-00	**RIKEN RI BEAM FACTORY STRIKES BACK** *H. En'yo*
10-00 - 10-30	**NEW FACILITY FOR SUPER HEAVY ELEMENT RESEARCH: FLNR SHE - FACTORY** *S. Dmitriev*
10-30 - 11-00	**CHALLENGES IN GENERATION OF INTENSE HEAVY ION BEAMS** *B. Sharkov*
11-00 - 11-30	*Coffee break*
11-30 - 12-00	**DECAY SPECTROSCOPY OF THE HEAVIEST NUCLEAR SPECIES AND PERSPECTIVES AT S3** *D. Ackermann*
12-00- 12-30	**RECENT HIGHLIGHTS AND NEW TRENDS @ JYFL** *A. Jokinen*
12-30- 13-00	**THE iTHEMBA LABS SAIF PROJECT AND OTHER FACILITY DEVELOPMENTS** *J.J. Lawrie*
13-00- 15-30	*Lunch*
Chairman	
15-00 - 15-30	**LATEST UPDATE ON THE SOUTH AFRICAN UNDERGROUND LABORATORY (SAUL) PROJECT AND OTHER DEVELOPMENTS** *Z. Vilakazi*
15-30 - 16-00	*GANIL/SPIRAL2 STATUS & PLANS* *H. Savajols*
16-00 - 16-30	*Coffee break*
16-30 - 17-00	**SPECTROSCOPY OF ^{63,65,67}Mn: STRONG COUPLING IN THE N=40 ISLAND OF INVERSION AND IMPROVED CONSTRAINTS FOR URCA COOLING IN THE ACCRETED NEUTRON STAR CRUST** *Zh. Liu*
17-00 – 17-30	**STATUS OF THE ALTO FACILITY AND RECENT HIGHLIGHTS** *F. Ibrahim*
17-30 - 18-00	**FISSION, QUASI-FISSION AND MULTI-NUCLEON TRANSFER PROCESSES FROM MEDIUM MASS TO HEAVY NUCLEI** *E. Vardaci*
18-00 - 18-30	**FUSION TRIGGERED LIQUID-PHASE TRANSMUTATOR MONITORED AND CONTROLLED REAL-TIME BY CAN** *S. Gales*
19-00	*WELCOME PARTY* *@ PITER INN HOTEL*

11.09.2018 Tuesday	
7-30	*Breakfast*
Chairman	
9-00 - 9-20	**PROJECT OF PRIORITY EXPERIMENTS AT SHE FACTORY** ***V. Utyonkov***
9-20 - 9-40	**PRESENT STATUS AND PERSPECTIVES OF *SHE* RESEARCHES AT *RIKEN*** ***H. Haba***
9-40 - 10-00	**STRUCTURE OF SUPERHEAVY NUCLEI** ***R. Jolos***
10-00 - 10-20	**SYSTEMATIC CALCULATIONS ON ALPHA-DECAY HALF-LIVES OF HEAVY AND SUPERHEAVY NUCLEI** ***Z. Ren***
10-20 – 10-40	**DYNAMICAL APPROACH FOR SYNTHESIS OF SUPERHEAVY ELEMENTS** ***Y. Aritomo***
10-40 - 11-00	**THEORETICAL STUDIES ON ENERGY DISSIPATION IN HEAVY-ION FUSION REACTIONS AND ITS APPLICATION TO SYNTHESIS OF ELEMENT 120** ***Y. Iwata***
11-00- 11-20	*Coffee break*
11-20 - 11-40	**PREDICTIONS OF FISSION FRAGMENT MASS DISTRIBUTIONS FOR SUPER-HEAVY ELEMENTS** ***N. Carjan***
11-40 - 12-00	**STUDY OF NEUTRON-DEFICIENT NUCLEI IN THE ^{239,240}Pu+^{48}Ca REACTIONS** ***M.V. Shumeiko***
12-00 - 12-20	**SPECTROSCOPY OF TRANSFERMIUM NUCLEI USING THE GABRIELA SETUP AT THE FOCAL PLANE OF THE "SHELS" RECOIL SEPARATOR, FLNR, DUBNA** ***K. Hauschild***
12-20 - 12-40	**EXPERIMENTAL STUDY OF THE $^{249-251}$Cf + ^{48}Ca REACTIONS: TOWARD THE MAGIC NEUTRON NUMBER N=184** ***A.A. Voinov***
12-40 - 13-00	**INVESTIGATION OF THE PROPERTIES OF SHORT-LIVED SF ISOTOPES OF TRANSFERMIUM ELEMENTS** ***A.V. Isaev***
13-00 - 15-00	*Lunch*
Chairman	
15-00 - 15-20	**ACHIEVEMENTS AND CHALLENGES IN THEORETICAL PREDICTIONS OF CHEMICAL PROPERTIES OF SUPERHEAVY ELEMENTS** ***V. Pershina***
15-20 - 15-40	**SUPERHEAVY ELEMENT CHEMISTRY AT FLNR** ***N. Aksenov***
15-40 - 16-00	**THE FIRST IONIZATION POTENTIALS OF HEAVY ACTINIDES Fm (Z = 100), Md (Z = 101), No (Z = 102), AND Lr (Z = 103)** ***T. Sato***
16-00 - 16-20	**PREPARATORY EXPERIMENTS FOR THE CHEMICAL INVESTIGATION OF NIHONIUM MONOHYDROXIDE** ***P. Steinegger***
16-20 - 16-40	**NEW PARADIGMS IN THE SEARCH FOR SHE** ***C. Borcea***
16-40 - 17-00	*Coffee break*
17-00 - 19-20	*SPECIAL SESSIONS*
19-30	*Dinner*

12.09.2018 Wednesday

7-30	***Breakfast***
Chairman	
9-00 - 9-30	**CLUSTERS IN LIGHT STABLE AND EXOTIC NUCLEI** ***C. Beck***
9-30 - 9-50	**TWO-NEUTRON HALO STATE OF ^{15}B AROUND 3.48 MeV BY A THREE-BODY MODEL** ***D. Bai***
9-50 - 10-10	**NEW INSIGHT INTO THE CLUSTER STRUCTURE OF ^{9}Be BY REACTIONS WITH DEUTERON BEAM** ***S. Lukyanov***
10-10 - 10-30	**COULOMB SHIFT IN TWO-CENTER CLUSTER SYSTEMS** ***M. Nakao***
10-30 - 10-50	**TOWARDS THE LIMITS OF NUCLEAR STRUCTURE ALONG THE PROTON-UNBOUND ARGON AND CHLORINE ISOTOPES** ***D. Kostyleva***
10-50 - 11-10	**STUDIES OF ^{22}C AND ^{50,52}Ca AT SAMURAI** ***Y. Togano***
11-10 - 11-30	***Coffee break***
11-30 - 11-50	**LIGHT CLUSTERS IN SUPERNOVA MATTER** ***I. Panov***
11-50 - 12-10	**SEARCH FOR STATES WITH HALO IN ^{12}B AND ^{12}N** ***A. Danilov***
12-10 - 12-30	**PROTON ELASTIC SCATTERING FROM ^{6}He AT 200 A MeV MEASURED WITH POLARIZED PROTON TARGET FOR RI-BEAM EXPERIMENTS** ***S. Sakaguchi***
12-30 – 12-50	**STUDY OF THE EFFECT OF POSITIVE Q-VALUE NEUTRON TRANSFERS ON NEAR-BARRIER FUSION OF HEAVY IONS** ***H. Jia***
12-50 - 13-10	**STUDY OF GROUND STATES OF 7,9,11LI NUCLEI AND DYNAMICS OF EXTERNAL NEUTRONS IN REACTIONS 7,9,11LI + 28SI** ***V. Samarin***
13-10 - 15-00	***Lunch***
Chairman	
15-00 – 15-20	**EVIDENCE OF ENHANCED 3α RADIUS PROBED BY HADRONIC REACTIONS** ***M. Ito***
15-20 – 15-40	**PROBLEM OF THE 2p-CAPTURE IN ASTROPHYSICS** ***Yu. Parfenova***
15-40 – 16-00	**COLLECTIVE MOTION IN STABLE AND UNSTABLE NUCLEI WITHIN NUCLEAR DENSITY FUNCTIONAL THEORY** ***N. Hinohara***
16-00 - 16-20	**MICROSCOPIC ANALYSIS OF THE ^{12,14}Be ELASTIC SCATTERING ON ^{12}C AND PROTONS** ***E. Zemlyanaya***
16-20 – 16-40	**IDENTIFICATION OF DILUTE CLUSTER STATES IN ^{11}B, ^{12}C, ^{13}C** ***A. Demyanova***
16-40 – 17-00	**STUDY OF NUCLEON TRANSFER IN REACTIONS ^{3}He + ^{197}Au, ^{194}Pt, ^{45}Sc, ^{59}Co WITHIN TIME-DEPENDENT APPROACH** ***M. Naumenko***
17-00 – 17-20	**NON-MONOTONIC MOLECULAR POTENTIAL FOR α + ^{12}C ELASTIC SCATTERING** ***M. Abdullah***
17-20 – 19-30	***P O S T E R SESSION***
19 -30	***Dinner***

13.09.2018 Thursday

8-00 - 9-00	***Breakfast***
Chairman	
9-00 - 9-30	**UNUSUAL STRUCTURES IN ^{163}Gd, STRUCTURE OF ^{163}Tb; CONFIRMATION OF HIGH NEUTRON YIELDS FOR Ba-Mo SF OF ^{252}Cf, FUTURE PLANS** ***J. Hamilton***
9-30 - 9-50	**HIGH SPIN γ-RAY SPECTROSCOPY OF HEAVY, OCTUPOLE DEFORMED Ac AND Fr NUCLEI PRODUCED IN FUSION-EVAPORATION REACTIONS WITH THE INTENSE A~90 RADIOACTIVE BEAMS** ***P. Bednarczyk***
9-50 - 10-10	**FUNDAMENTAL SYMMETRY TESTS USING ATOMIC NUCLEI: THE ROLE OF NUCLEAR STRUCTURE** ***S. Triambak***
10-10 - 10-30	**NEW NUCLEAR STRUCTURE DATA BEYOND ^{132}Sn** ***R. Lozeva***
10-30 - 10-50	**REACTIONS WITH EXOTIC NUCLEI AT ENERGIES AROUND THE COULOMB BARRIER** ***C. Lin***
10-50 - 11-10	**EXOTIC NUCLIDES AT THE REACTOR PIK: PITRAP PROJECT** ***Yu. Novikov***
11-10 - 11-30	***Coffee break***
11-30 - 11-50	**DISCOVERY OF ^{60}Ca** ***O. Tarasov***
11-50 - 12-10	**A NEW EXPLANATION OF HEAVY IONS SUB-BARRIER FUSION ENHANCEMENT PHENOMENON** ***R. Wolski***
12-10 - 12-30	**FOUR BODY KAONIC NUCLEI** ***S. Tsiklauri***
12-30- 13-30	***Lunch***

13-30

EXCURSION

&

CONCERT

19-00	*BANQUET*

	14.09.2018 Friday
7-30	***Breakfast***
Chairman	
9-00 - 9-20	**"PARIS" GAMMA CALORIMETER – STATUS OF THE PROJECT AND FIRST EXPERIMENTAL RESULTS** ***A. Maj***
9-20 - 9-40	**HIGHLIGHTS OF THE DAY-ONE EXPERIMENTAL PROGRAM AT THE GAMMA-BEAM SYSTEM OF ELI-NP** ***D. Balabanski***
9-40 - 10-00	**ROLE OF PENNING-TRAP MASS SPECTROMETRY IN FUNDAMENTAL PHYSICS** ***S. Eliseev***
10-00 - 10-20	**DEMONSTRATION OF MASS MEASUREMENT USING RARE-RI RING** ***D. Nagae***
10-20 - 10-40	**IGISOL: RECENT RESULTS AND DEVELOPMENTS** ***T. Eronen***
10-40 – 11-00	**PRODUCTION AND STUDY OF NEUTRON RICH HEAVY NUCLEI, GALS SETUP** ***S. Zemlyanoy***
11-00 - 11-20	***Coffee break***
11-20 - 11-40	**BEYOND-NEUTRON-THRESHOLD SPECTROSCOPY PROGRAM AT ALTO WITH TETRA, MONSTER AND PARIS SPECTROMETERS** ***D. Verney***
11-40 - 12-00	**ACCELERATOR FACILITIES OF FLNR. STATUS AND PLANS OF DEVELOPMENT** ***V. Semin***
12-00 - 12-20	**PRODUCTION OF NEUTRON-RICH NUCLEI BY MULTINUCLEON TRANSFER REACTIONS AT KISS PROJECT** ***Y. Watanabe***
12-20- 12-40	**NEW FRONT AND BACK-END ELECTRONICS FOR THE UPGRADED GABRIELA DETECTION SYSTEM** ***R. Chakma***
12-40– 13-00	**INVESTIGATION OF INTERACTION OF DEUTRONS WITH ^{13}C NUCLEI** ***D. Janseitov***
13-00 15-00	***Lunch***
Chairman	
15-00 - 15-20	**EXPERIENCE OF REACTION STUDIES AT ACCULINNA AND PROSPECTIVE RESEARCH AT ACCULINNA-2** ***L. Grigorenko***
15-20 - 15-40	**PRODUCTION OF NEW ISOTOPES AND SEARCH FOR NEUTRON DRIP LINE WITH THE BigRIPS SEPARATOR AT RIKEN RI BEAM FACTORY** ***N. Fukuda***
15-40 - 16-00	**FEATURES OF THE SOLID-STATE ISOL METHOD FOR FUSION EVAPORATION REACTIONS INDUCED BY HEAVY IONS** ***A. Rodin***
16-00 - 16-20	**STUDY OF ^{6}He-d REACTION AS A FIRST EXPERIMENT AT ACCULINNA-2 SEPARATOR** ***B. Zalewski***
16-20 - 16-40	**ROLE OF CONSTANT VALUE OF SURFACE DIFFUSENESS ON PREDICTION OF ALPHA DECAY HALF-LIVES OF SUPERHEAVY NUCLEI** ***S. Alavi***

	14.09.2018 Friday
16-40 - 17-10	***Coffee break***
17-10 - 17-30	**GALILEO GAMMA-RAY SPECTROMETER** ***D. Testov***
17-30 - 17-50	**THE STATUS OF NEW FRAGMENT SEPARATOR ACCULINNA-2 AND THE FIRST DAY EXPERIMENTS** ***A. Gorshkov***
17-50 – 18-10	**FISSION TIMESCALE OF SUPERHEAVY ELEMENT Z = 120** ***M. Senthil Kannan***
18-10 – 18-30	**TOPOLOGICAL TYPOLOGY OF NUCLEI** ***A. Yushkov***
18-30 – 18-50	**OBSERVATION OF U AND CF FISSION IN NUCLEAR TRACK EMULSION** ***A. Zaitcev***
18-50 – 19-10	**MAVR FACILITY AT FLNR JINR** ***V. Maslov***
19-10 – 19-30	
19-30	***Farewell dinner***

	13.09.2018 Tuesday
	SPECIAL SESSION 1 ***"NUCLEAR REACTIONS & FISSION PROCESSES"***
Chairman	
17-00 - 17-20	**RADIOACTIVE ION BEAMS FOR THE FISSION STUDY OF THE HEAVIEST NEUTRON-RICH NUCLEI** ***G. Ter-Akopian***
17-20 - 17-40	**ISOBARIC RESONANCES IN CHARGE-EXCHANGE REACTIONS** ***Yu. Lutostansky***
17-40 - 18-00	**HEAVY-ION REACTION AND FISSION STUDIES AT JAEA TANDEM ACCELERATOR FACILITY** ***K. Nishio***
18-00 - 18-20	**MANIFESTATIONS OF PEAR-SHAPED CLUSTERS IN COLLINEAR CLUSTER TRI-PARTITION OF ^{252}Cf** ***Yu. Pyatkov***
18-20 - 18-40	**ADDITIONAL ARGUMENTS IN FAVOR OF TRUE QUATERNARY FISSION OF LOW EXCITED ACTINIDES** ***D. Kamanin***
18-40 - 19-00	**MEASUREMENT OF MASS-GATED NEUTRON MULTIPLICITY FOR ^{192,202}Po NUCLEI USING NAND FACILITY** ***R. Mahajan***
19-00 - 19-20	**GAMMA RAYS AS PROBE OF FISSION AND QUASI-FISSION DYNAMICS IN THE REACTION ^{32}S + ^{197}Au NEAR THE COULOMB BARRIER** ***A. Pulcini***

	SPECIAL SESSION 2 ***"R-PROCESSES & β AND γ DECAYS"***
Chairman	
17-00 - 17-20	**R-PROCESS NUCLEI NEAR N=126 AND STABILITY BEYOND DRIP-LINE IN THE RELATIVISTIC HARTREE-BOGOLIUBOV THEORY** ***M. Sharma***
17-20 - 17-40	**BETA-DECAY STUDIES OF EXTREMELY PROTON-RICH NUCLEI FROM Mg TO S** ***X. Xu***
17-40 - 18-00	**SHAPE COEXISTENCE IN ^{31}Mg REVEALED BY β-γ AND β-n-γ SPECTROSCOPY WITH SPIN-POLARIZED ^{31}Na** ***H. Nishibata***
18-00 - 18-20	**BETA-DECAY AND DELAYED MULTI-NEUTRON EMISSION IN VERY NEUTRON-RICH ISOTOPES** ***I. Borzov***
18-20 - 18-40	**TWO-PHONON STRUCTURES OF BETA-DECAY RATES** ***A. Severyukhin***
18-40 - 19-00	**EXOTIC ONE AND TWO PROTON RADIOACTIVITY** ***S. Panikath***
19-00 - 19-20	

12.09.2018 Wednesday

POSTER SESSION

p-n CORRELATION MEASUREMENTS FROM REACTION ^{2}H(^{9}Li,p)^{10}Li USING RIB FROM FRAGMENT SEPARATOR ACCULINNA-2 ***A. Bezbakh***	**1**
SEPARATION EFFICIENCY MEASUREMENT OF THE MASS SEPARATOR MASHA FOR SHORT-LIVED Hg AND Rn ISOTOPES ***E. Chernysheva***	**2**
EMISSION OF HIGH ENERGY PARTICLES IN HEAVY ION COLLISIONS IN HYDRODYNAMIC APPROACH ***A. D'yachenko***	**3**
EXPERIMENTAL FOUNDATIONS OF NUCLEAR PHYSICS IN NON-EUCLIDEAN SPACES ***V. Dyachkov***	**4**
TOTAL REACTION CROSS SECTIONS OF NEUTRON-RICH LIGHT NUCLEI MEASURED BY THE COMBAS FRAGMENT-SEPARATOR ***B. Erdemchimeg***	**5**
SILICON FOUR-SEGMENT CHARGED PARTICLE DETECTORS ***I. Gazizov***	**6**
GROUND-STATE ELECTROMAGNETIC MOMENTS OF ^{21}O ***A. Gladkov***	**7**
TOTAL REACTION CROSS SECTION AND BREAKUP REACTION OF WEAKLY BOUND CLUSTER LIGHT NUCLEI AT 22 TO 34 MeV/u ***B. Hue***	**8**
THE EXPERIMENTAL SETUP TO STUDY WEAKLY BOUND NUCLEI BY THE COMBAS FRAGMENT SEPARATOR ***T. Isataev***	**9**
STRUCTURE OF β-DECAY STRENGTH FUNCTION $S_{\beta}(E)$ AND WIGNER SPIN-ISOSPIN SU(4) SYMMETRY ***I. Izosimov***	**10**
ROLE OF DEFORMATION AND ORIENTATION OF TARGET NUCLEUS ON THE COULOMB BARRIER PARAMETERS ***G. Kaur***	**11**
STUDY OF CLUSTER STRUCTURE OF ^{8,9,10}Be IN DEUTERON INDUCED REACTIONS ON ^{9}Be ***E. Konobeevski***	**12**
A SEARCH FOR ALTERNATIVE WAYS FOR PRODUCING OF NEW NEUTRON RICH HEAVY AND SUPERHEAVY NUCLEI ***E. Kozulin***	**13**
A NEW SCATTERING CHAMBER FOR CONDUCTING PRECISION EXPERIMENTS ON THE HEAVY-ION REACTION CROSS SECTIONS AT THE ACCELERATOR DC-60 (ASTANA) AT LOW ENERGIES ***K. Kuterbekov***	**14**
INFORMATION PROVIDING OF FUNDAMENTAL RESEARCH ***V. Lukashov***	**15**
EVALUATION FOR POSSIBILITY OF SYNTHESIZING NEW SUPERHEAVY ELEMENT ***N. Mohd Anuar***	**16**
QUARK MODEL OF NUCLEAR STRUCTURE: FROM STABLE NUCLEI TO NUCLEAR DRIP LINE ***G. Musulmanbekov***	**17**
CONTROL AND DATA ACQUISITION SYSTEMS OF THE MASHA SETUP ***A. Novoselov***	**18**