



SYMPOSIUM PROGRAM

08.09.2014 Monday

7-30	<i>Breakfast</i>
9-00	<i>Departure to Kaliningrad</i>
10-30 - 11-00	<i>Opening at Kant University</i>
<i>Chairman</i>	Boris Sharkov
11-00 - 11-35	RIKEN RI BEAM FACTORY - HARVEST TIME H. En'yo
11-35 - 12-10	NUCLEI AT THE END OF NUCLEAR MAP Yu. Oganessian
12-10 - 12-25	<i>Coffee break</i>
12-30 - 13-05	STATUS OF THE GANIL / SPIRAL2 FACILITY F. Staley
13-05 - 13-40	EXPERIMENTS AT THE FRONTIERS OF NUCLEAR PHYSICS: THE EXPERIMENTAL PROGRAM OF THE NEW SUPER-FRS COLLABORATION C. Scheidenberger
13-40 - 15-00	<i>Lunch</i>
<i>Chairman</i>	Dominique Guillemaud-Mueller
15-00 - 15-35	PRESENT CAPABILITIES AND FUTURE PLANS OF THE TEXAS A&M CYCLOTRON INSTITUTE S. Yennello
15-35 - 16-10	FACILITY FOR RARE ISOTOPE BEAMS AT MSU G. Bollen
16-10 - 16-45	MARRIAGE OF LASER AND ACCELERATOR TECHNOLOGY: NUCLEAR PHYSICS WITH NEXT GENERATION OF HIGH POWER LASER AND BRILLIANT LOW ENERGY GAMMA BEAMS AT ELI-NP S. Gales
16-45 - 17-00	<i>Coffee break</i>
17-00 - 17-35	iTHEMBA LABS - AN OVERVIEW OF RESEARCH AND FUTURE DEVELOPMENTS K. Lawrie
17-35 - 18-10	THE ALTO FACILITY AT IPN ORSAY F. Ibrahim
18-10	<i>Departure to Zelenogradsk</i>
19-30	<i>Reception at Sambia Hotel</i>

09.09.2014 Tuesday

7-30	Breakfast
Chairman	Hideto En'yo
9-00 - 9-35	CHALLENGES IN NUCLEAR PHYSICS: NOW AND IN NEAREST FUTURE W. Greiner
9-35 - 10-10	FUSION, BREAKUP AND SCATTERING OF LIGHT UNSTABLE NUCLEI P. P. Gomes
10-10 - 10-35	NUCLEAR AND APPLIED RESEARCH AT JYFL ACCELERATOR LABORATORY A. Jokinen
10-35 - 11-00	SHELL STRUCTURE IN HEAVY NUCLEI P. Greenlees
11-00 - 11-15	Coffee break
Chairman	Georg Bollen
11-15 - 11-40	STUDY OF NEUTRON-UNBOUND STATES WITH MoNA-LISA M. Thoennessen
11-40 - 12-15	NEW LEVELS IN ^{149,150,151,152,153}Pr BY COMBINING HIGH STATISTICS γ DATA AND MASS/Z GATED SPECTRA J. Hamilton
12-15 - 12-40	RECENT RESULTS FROM COLLINEAR LASER SPECTROSCOPY AT ISOLDE-CERN G. Neyens
12-40 - 13-05	GAMMA-RAY SPECTROSCOPY OF EXOTIC NUCLEI WITH EURICA H. Watanabe
13-05 - 13-30	THE LASER ION SOURCE AT IPN-ALTO R. Li
13-30 - 15-30	Lunch
15-30 - 17-00	SPECIAL SESSIONS
17-00 - 17-20	Coffee break
17-20 - 19-20	SPECIAL SESSIONS
19-30	Dinner & concert

10.09.2014 Wednesday

7-30 - 9-00	Breakfast
Chairman	Walter Greiner
9-00 - 9-35	OVERVIEW OF SEARCH FOR NEW ISOTOPES AND NEW ISOMERS AT RIKEN RI BEAM FACTORY T. Kubo
9-35 - 10-00	ACTIVE TARGET-TIME PROJECTION CHAMBERS FOR REACTIONS INDUCED BY RARE ISOTOPE BEAMS: PHYSICS AND TECHNOLOGY W. Mittig
10-00 - 10-25	EXOTIC NUCLEI AND MATTER IN A CHIRALLY EFFECTIVE APPROACH S. Schramm
10-25 - 10-50	SHE RESEARCH ON THE WAY TO NUSTAR AT FAIR G. Muenzenberg
10-50 - 11-15	LASER SPECTROSCOPY AT GSI AND FAIR – RECENT RESULTS AND PROSPECTS W. Nörtershäuser
11-15 - 11-35	Coffee break
Chairman	Sherry Yennello
11-35 - 12-10	RECENT RESULTS AT GANIL AND FUTURE PHYSICS PROGRAM AT SPIRAL2 M. Lewitowicz
12-10 - 12-35	HIGH-RESOLUTION FRS AND SUPER-FRS EXPERIMENTS AT GSI-FAIR H. Geissel
12-35 - 13-00	PRECISION MASS MEASUREMENTS OF SHORT-LIVED NUCLIDES AT STORAGE RING IN LANZHOU Y. H. Zhang
13-00 - 13-25	CYCLOTRON CENTER BRONOWICE IN KRAKOW - THE NEW FACILITY FOR THE HADRONTHERAPY AND BASIC RESEARCH A. Maj
13-30 - 15-30	Lunch
Chairman	Adam Sobiczewski
15-30 - 15-55	SEARCH FOR ISOTOPES OF ELEMENT 120 ON THE ISLAND OF SHN S. Hofmann
15-55 - 16-20	SYNTHESIS OF SUPERHEAVY NUCLEI WITH Z=112-118 V. Utyonkov
16-20 - 16-45	ADVANCED STUDIES OF ELEMENT 115 AND 117 DECAY CHAINS C. Duellmann
16-45 - 17-10	INVESTIGATION OF $^{70,72,74}\text{Ni}$ FROM β DECAY OF $^{70,72,74}\text{Co}$ A. Morales
17-10 - 17-35	LAYOUT OF NEW EXPERIMENTS ON THE OBSERVATION OF SPONTANEOUS CREATION OF e^-/e^+ PAIRS IN SUPERCRITICAL COULOMB FIELDS G. Ter-Akopian
17-35 - 18-00	POSSIBILITY OF SYNTHESIZING A SUPERHEAVY NUCLEUS AT THE CENTER OF ISLAND OF STABILITY Y. Aritomo
18-00 - 20-00	POSTER SESSION
20-00	Dinner

11.09.2014 Thursday

7-30 - 9-00	<i>Breakfast</i>
<i>Chairman</i>	Alexander Belushkin
9-00 - 9-35	PRODUCTION OF EXOTIC NUCLEI IN LOW-ENERGY MULTI-NUCLEON TRANSFER REACTIONS V. Zagrebaev
9-35 - 10-00	T. Uesaka
10-00 - 10-25	TRUE TERNARY FISSION: MULTIPLE COLLINEAR FISSION MODES REVEALED FROM POTENTIAL ENERGY SURFACES AND EXPERIMENTS W. von Oertzen
10-25 - 10-50	RECENT PROGRESS IN EXOTIC NUCLEI STUDIES USING RESONANCE SCATTERING G. Rogachev
10-50 - 11-10	<i>Coffee break</i>
11-10 - 11-35	NEW VISION FOR OLD PHYSICS OF ALPHA CLUSTERS IN NUCLEI V. Goldberg
11-35 - 12-00	STUDY FOR FISSION USING MULTI-NUCLEON TRANSFER REACTION K. Nishio
12-00 - 12-25	PROSPECTS FOR SEARCHING FOR NATURAL SHEs IN SOUTH AFRICA WITH ACCELERATOR MASS SPECTROMETRY S. Mullins
12-30 - 14-00	<i>Lunch</i>
14-00	 <p><i>EXCURSION</i></p> <p><i>&</i></p> <p><i>CONCERT</i></p> <p><i>&</i></p> <p><i>BANQUET</i></p>

12.09.2014 Friday

7-30 - 9-00	<i>Breakfast</i>
Chairman	Kobus Lawrie
9-00 - 9-25	CASE FOR AN UNDERGROUND ASTROPHYSICS LABORATORY IN SOUTH AFRICA Z. Vilakazi
9-25 - 9-50	NUCLEAR STATES WITH ABNORMALLY LARGE SIZES A. Ogloblin
9-50 - 10-15	PHYSICS WITH MINOS AT THE RIBF A. Obertelli
10-15 - 10-40	PROBING NEUTRON-SKIN THICKNESS OF UNSTABLE NUCLEI WITH TOTAL REACTION CROSS SECTIONS W. Horiuchi
10-40 - 11-05	TOTAL REACTION CROSS-SECTION FOR THE ${}^6\text{He}+{}^9\text{Be}$ SYSTEM K. Pires
11-05 - 11-25	<i>Coffee break</i>
11-25 - 11-50	STUDY OF THE N=50 SHELL GAP EVOLUTION TOWARDS ${}^{78}\text{Ni}$ AT ALTO: INVESTIGATING THE Z=32 "SINGULARITY" D. Verney
11-50 - 12-15	THE ITHEMBA LABS RADIOACTIVE BEAMS PROJECT R. Bark
12-15 - 12-40	THE IGISOL TECHNIQUE – THREE DECADES OF DEVELOPMENTS I. Moore
12-40 - 13-05	PROJECTILE FRAGMENTATION AS A TOOL TO OBSERVE SHELL EFFECTS CLOSE TO THE NEUTRON DRIP-LINE O. Tarasov
13-30 - 15-00	<i>Lunch</i>
Chairman	Wladyslaw Trzaska
15-00 - 15-25	ENERGY CALIBRATION OF THE MGNS (MERCURIAN GAMMA AND NEUTRON SPECTROMETER) AT IBR-2 REACTOR V. Shvetsov
15-25 - 15-50	FEW-BODY MODELS OF LIGHT NUCLEI S. Ershov
15-50 - 16-15	HEAVY AND SUPERHEAVY ELEMENTS PRODUCTION IN HIGH INTENSIVE NEUTRON FLUXES OF EXPLOSIVE PROCESS Yu. Lutostansky
16-15 - 16-40	SUB-BARRIER FUSION: DOES REARRANGEMENT OF NEUTRONS PLAY A ROLE? A. Karpov
16-40 - 17-00	<i>Coffee break</i>
17-00 - 17-25	LOW-ENERGY NUCLEAR SPECTROSCOPY IN A MICROSCOPIC MULTIPHONON APPROACH Ch. Stoyanov
17-25 - 17-50	COMPLEX CONFIGURATION EFFECTS ON β -DECAY RATES A. Severyukhin
17-50 - 18-15	EXCITED STATES OF HELIUM ISOPOPEs ${}^{6,7}\text{He}$ B. Chernyshev
18-15 - 18-40	ASTROPHYSICAL ASPECTS OF ${}^4\text{He}(2n,\gamma){}^6\text{He}$ RADIATIVE CAPTURE REACTION A. Denikin
19-30	<i>Farewell dinner</i>

13.09. 2014 Saturday

7-30 - 9-00	<i>Breakfast</i>
<i>Chairman</i>	Chavdar Stoyanov
9-00 - 9-25	CAN WE OBSERVE A "STIMULATED" PROTON BETA-DECAY? C. Borcea
9-25 - 9-50	RARE MECHANISMS OF STOPPED PIONS ABSORPTION BY $^{10,11}\text{B}$ BORON NUCLEI L. Korotkova
9-50 - 10-15	MICROSTRUCTURE MANIFESTATIONS IN NUCLEAR REACTIONS S. Karamian
10-40 - 11-05	<i>Coffee break</i>
11-05 - 11-30	
11-30 - 12-05	
12-05 - 12-30	
13-00 - 15-00	<i>Lunch</i>
15-00	<i>DEPARTURES</i>

09.09.2014 Tuesday

SESSION "CHEMISTRY OF SUPER HEAVY ELEMENTS"

Chairman Sergey Dmitriev

STUDIES ON CHEMICAL AND NUCLEAR PROPERTIES OF THE HEAVIEST ELEMENTS AT JAEA

Y. Nagame

RANSACTINIDE CARBONYL COMPLEXES: A NEW CLASS OF COMPOUNDS IN SUPERHEAVY ELEMENT CHEMISTRY

A. Türler

ADVANCED THEORETICAL STUDIES FOR CHEMICAL IDENTIFICATION AND PREDICTION OF CHEMICAL BEHAVIOUR OF THE HEAVIEST ELEMENTS

V. Pershina

SUPERHEAVY ELEMENT CHEMISTRY BY RELATIVISTIC DENSITY FUNCTIONAL THEORY ELECTRONIC STRUCTURE MODELING

A. Titov

POTENTIAL AND FUTURE OF CHEMICAL INVESTIGATIONS OF SUPERHEAVY ELEMENTS

R. Eichler

A. Yakushev

FLNR SHE FACTORY

S. Dmitriev

SESSION "ACCULINNA-2 PROJECT"

Chairman Andrey Fomichev

PROSPECT OF ACCULINNA-2 FACILITY

A. Fomichev

TWO-PROTON AND TWO-NEUTRON RADIOACTIVITY MEASURED IN-FLIGHT BY TRACKING TECHNIQUE

I. Mukha

FIRST EXPERIMENTS AT THE FRAGMENT-SEPARATOR ACCULINNA-2: HYDROGEN-7

S. Sidorchuk

TWO-PROTON DECAY OF THE FIRST EXCITED STATE OF ^{17}Ne

M. Golovkov

TRUE THREE-BODY DECAYS OF THE 2^+ STATES: ^6Be EXAMPLE

V. Chudoba

SI DETECTORS FOR NUCLEAR PHYSICS EXPERIMENTS WITH EXOTIC BEAMS

O. Kiselev

L. Grigorenko

09.09.2014 Tuesday

SESSION "NUCLEAR REACTIONS & FISSION"

Chairman Mikhail Itkis

LATEST DEVELOPMENTS IN NUCLEAR, PARTICLE, AND ASTROPARTICLE PHYSICS AT JYFL

W. Trzaska

NEW ROTATIONAL BAND IN ^{11}B

A. Demyanova

EXPERIMENTAL STUDY OF HEAVY ION INDUCED REACTIONS AT ENERGIES CLOSE TO THE COULOMB BARRIER

E. Kozulin

STUDY OF SHAPE ISOMERIC STATES IN FISSION FRAGMENTS

Yu. Pyatkov

INTERNAL STRUCTURES OF $^9,^{10}\text{Be}$ AND ^{10}B IN SCATTERING OF ^4He FROM ^9Be

S. Lukyanov

DYNAMICAL ASPECTS OF QUASIFISSION PROCESS IN HEAVY-ION-INDUCED REACTIONS

G. Knyazheva

10.09.2014 Wednesday

POSTER SESSION

COMPLETE AND INCOMPLETE FUSION PROCESSES IN ^{11}B-INDUCED REACTION ON ^{197}Au TARGET AT ENERGIES ABOVE THE COULOMB BARRIER N.A.Demekhina	1
INTERACTION CROSS SECTIONS OF $^{17-32}\text{Ne}$-^{12}C AT 240 AMeV AND THE HALO STRUCTURE OF ^{31}Ne Z. Khan	2
FUSION REACTIONS INDUCED BY $^{4,6,8}\text{He}$ ON HEAVY TARGETS A. A. Hassan	3
HOW DOES THE NEUTRON REARRANGEMENT WITH POSITIVE Q-VALUES INFLUENCE THE SUB-BARRIER FUSION OF LIGHT WEAKLY BOUND NUCLEI V.A. Rachkov	4
MOMENTUM DISTRIBUTIONS IN STRIPPING REACTIONS OF HALO NUCLEI ON LIGHT TARGET V.P. Zavarzina	5
EVIDENCE FOR THE STATES WITH ABNORMALLY LARGE RADII IN ^{13}C A.N. Danilov	6
STUDY OF CLUSTER STRUCTURE OF LIGHT NUCLEI BY PROTON QUASIFREE SCATTERING AT LOW ENERGIES E. Konobeevski	7
APPLICATION OF MICROSCOPIC OPTICAL POTENTIAL MODEL TO ANALYZE THE $^{10,11}\text{Be}$ ELASTIC SCATTERING ON PROTONS AND NUCLEI K. V. Lukyanov	8
TOTAL REACTION CROSS SECTION EXCITATION FUNCTION FOR ^6He, $^8,9\text{Li}$ PARTICLES WITH ^{181}Ta, ^{59}Co, ^{28}Si, ^9Be NUCLEI Yu.G. Sobolev	9
MEASUREMENTS OF THE TOTAL REACTION CROSS SECTIONS FOR $^6,8\text{He}$, $^8,9\text{Li}$ AND ^8B NUCLEI ON ^{27}Al, ^{181}Ta AND ^{208}Pb Yu. M. Sereda	10
ANALYSIS OF INTERACTION CROSS-SECTIONS OF IONS ^6He, $^8,9\text{Li}$ WITH NUCLEI $A = 9 - 181$ AT LOW ENERGIES K.A. Kuterbekov	11
STUDY OF THE RESONANCE IN THE $\alpha+^{13}\text{C}$ INTERACTION AT LOW ENERGIES N.A. Mynbayev	12
THE MICROSCOPIC ANALYSIS OF THE NEUTRON TRANSFER AND FUSION REACTIONS WITH NUCLEI ^6He AND ^8He V.V. Samarin	13
PAIRED AND QUASISTATIONARY WAVE FUNCTIONS FOR HALO NUCLEI AND DECAYS V.V. Samarin	14
EXPOSURES OF NUCLEAR TRACK EMULSION TO LIGHT RADIOACTIVE NUCLEI, NEUTRONS AND HEAVY IONS P. I. Zarubin	15
A NON-EQUILIBRIUM EQUATION OF STATE IN HEAVY-ION COLLISIONS AT INTERMEDIATE ENERGIES	16

A.T. D'yachenko	
MAIN PHYSICAL PROPERTIES OF AN EXOTIC QUASIPARTICLES V.A. Skvortsov	17
THE TWIN EXOTIC QUASIPARTICLES V.A. Skvortsov	18
SUPERHEAVY ELEMENT CHEMISTRY BY RELATIVISTIC DENSITY FUNCTIONAL THEORY ELECTRONIC STRUCTURE MODELING A. Zaitsevskii	19
RECENT EXPERIMENT ON SYNTHESIZING FLEROVIUM ISOTOPES IN THE REACTION $^{239}\text{Pu} + ^{48}\text{Ca}$ M.V. Shumeiko	20
GENERATION OF BISMUTH ISOTOPES IN $\text{Bi}_2(\text{SO}_4)_3$ SOLUTION AFTER ELECTROSTATIC FIELD EXPOSURE D.S. Baranov	21
THE GAMMA QUANTA PROBE IN THE FUSION-FISSION DYNAMICS IN THE REACTION $^{34}\text{S} + ^{186}\text{W}$ NEAR THE INTERACTION BARRIER I.M. Harca	22
GENERATION OF BISMUTH ISOTOPES IN $\text{Bi}_2(\text{SO}_4)_3$ SOLUTION AFTER ELECTROSTATIC FIELD EXPOSURE D.S. Baranov	23
NEW DIRECTIONS IN STUDY OF TERNARY DECAYS D.V. Kamanin	24
EXPERIMENTS ON THE SYNTHESIS OF THE SUPERHEAVY NUCLEI $Z=117$ IN THE COMPLETE-FUSION $^{48}\text{Ca}(^{249}\text{Bk}, \text{XN})^{297-X}117$ REACTION A.A. Voinov	25
THE MULTICHANNEL TIME DISTRIBUTIONS SPECTROMETER IN REAL TIME D.D. Kharitonova	26
STUDY OF $^{82,83}\text{Ga}$ PRODUCED AT ALTO WITH NEUTRON DETECTOR TETRA D. Testov	27
PRODUCTION AND STUDY OF NEUTRON-RICH ISOTOPES NEAR THE NEUTRON $N=152$ SHELL CLOSURE A.M. Rodin	28
EFFECT OF NUCLEAR SHELL STRUCTURE ON HEAVY-ION FUSION REACTIONS FOR COMPOUND NUCLEI WITH $Z \geq 80$ L. Krupa	29
MAGNETIC ANALYZER MAVR FOR STUDY EXOTIC WEAKLY BOUND NUCLEI V. A. Maslov	30
DEGENERATION OF GAMOW-TELLER AND ANALOG RESONANCES IN HEAVY NUCLEI AND WIGNER $SU(4)$-SYMMETRY RESTORATION Yu.S. Lutostansky	31
THE PROTON AND ELECTRON NON-STABILITY IN THE DARK MATTER MODELS G.Volkov	32
THE NEUTRON MULTIPLICITY STADY AT SPONTANEOUS FISSION OF SHORT-LIVED ISOTOPES ($Z > 100$) USING VASSILISSA RECOIL SEPARATOR A.Svirikhin	33
PHYSICAL PROGRAM AND STATUS OF THE VEGA PROJECT A.Alexandrov	34
EXPERIMENTAL TESTING OF THE HI MASS RECONSTRUCTION PROCEDURE AT "LIS" SETUP A.Strekalovsky	35
INFLUENCE OF NUCLEAR REACTION MECHANISMS ON POPULATION OF ISOMERIC STATES AND RATIOS N.Skobelev	36

SPECTROSCOPY OF URANIUM ISOTOPES ON “SHELs” SEPARATOR A.Isaev	37
DEVELOPMENT OF NEUTRON DETECTORS FOR THE STUDIES ON THE ACCULINNA AND ACCULINNA-2 SETUPS R. Slepnev	38
CALCULATED SCISSION-NEUTRON PROPERTIES IN AGREEMENT WITH EXPERIMENTAL DATA ON PROMPT NEUTRONS N. Carjan	39