

September 25, Monday
Conference Hall of BLTP JINR
Plenary Session

Chairman A. Malakhov

- 10.00 *Sissakian A.* (JINR)
Opening
- 10.10 *Burov V., Malakhov A.* (JINR)
On Baldin's ideas in relativistic nuclear physics
- 10.40 *Baldin A.* (JINR)
Importance and development of some ideas of A. M. Baldin
in the field of relativistic multiparticle interactions
- 11.20 *Konopleva N.* (JINR)
"Baldin autumn" and gauge fields

Coffee break 12.00 – 12.30

Quantum Chromodynamics at the Large Distances

Chairman V. Burov

- 12.30 *Efimov G.* (JINR)
QCD vacuum, confinement, meson spectrum
- 13.10 *Ivanov M.* (JINR)
Reaction $\gamma\gamma \rightarrow \pi\pi$ at low energies and pion polarizabilities

Break 13.50 – 15.00

September 25, Monday
Conference Hall of BLTP JINR
Plenary Session

Quantum Chromodynamics at the Large Distances

Chairman G. Efimov

- 15.00 *Gerasimov S.* (JINR)
On the dispersion and current algebra sum rules
for photoabsorption cross-sections: The quest for neutron data
- 15.20 *Polyakov M.* (Germany/Russia)
New soft pion theorems for hard processes
- 16.00 *Pervushin V.* (JINR)
Simultaneous Interactions in Standard Model
- 16.20 *Solovtsov I.* (JINR)
Nonperturbative expansion method in QCD and R-related quantities
- 16.40 *Kosmachev O.* (JINR)
Discrete symmetries and algorithm of lepton equations
- 17.00 *Teryaev O.* (JINR)
Spin structure of nucleon, gravitational formfactors and nonperturbative QCD
- 17.20 End of the session
- 18.00 ***Welcome Party (BLTP)***

September 26, Tuesday
Conference Hall of BLTP JINR
Parallel Session

Cumulative processesChairman C. Perdrisat

- 9.00 **Shimanskiy S.** (JINR)
Quark-gluon phases of the nuclear matter
I. The cold quark-gluon phase and high p_T physics
- 9.40 **Uzikov Yu.** (JINR)
Scaling Onset in the Reactions $dd \rightarrow p^3H$ and $pd \rightarrow pd$ with High p_T at intermediate energies
- 10.00 **Zagreev B.** (Russia)
High p_t cumulative processes. Estimate for cross sections and back-to-back correlations
- 10.20 **Kulikov V.** (Russia)
Quasielastic deuteron and triton knock out from light nuclei by intermediate energy pions (experiment)

Coffee break 11.20 – 11.50**Hadron spectroscopy**Chairman S. Gerasimov

- 11.50 **Aslanyan P.** (JINR)
The preliminary result from spectra of $K^0_s \pi$ in reaction $p + \text{propane}$ at 10 GeV/c
- 12.10 **Aslanyan P.** (JINR)
 Λp spectrum analysis at 10 GeV/c in $p + C$ interactions
- 12.30 **Barabanov M.** (JINR)
Search for radial excited states of charmonies in experiments using cooled antiproton beams
- 12.50 **Dineykhyan M.** (JINR)
Light Meson Regge Trajectories in the Field Correlator Method
- 13.10 **Titov A.** (JINR)
 Θ^+ formation in inclusive $\gamma D \rightarrow p K^- X$ reaction

Break 13.40 – 15.00

Dubna, Russia
Joint Institute for Nuclear Research

September 26, Tuesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Multiparticle dynamicsChairman M. Tokarev

- 9.00 **Slowinski B.** (Poland)
Multiplicity-rapidity-impact parameter correlation in hadron-nucleus interactions at intermediate energies
- 9.20 **Smolyansky S.** (Russia)
Vacuum pion creation in the field of optical laser
- 9.40 **Kokoulina E.** (JINR)
Multiparticle production at high multiplicities
- 10.00 **Okorokov V.** (Russia)
Pion jets at intermediate energies: fractal and collective properties in the four-dimensional velocity space
- 10.20 **Bunzarov I.** (JINR)
Events structure of pC , dC , αC and CC collisions at energy 4.2 A GeV
- 10.40 **Rogachevsky O.** (JINR)
Study of events structure of heavy ion collisions at high energies

Coffee break 11.20 – 11.50Chairman B. Slowinski

- 11.50 **Tokarev M.** (JINR)
z-Scaling at RHIC and TEVATRON
- 12.30 **Dedovich T.** (JINR)
Jets in pp collisions at RHIC and MC study of z-scaling
- 12.50 **Zborovsky I.** (Czech Republic)
Self-similar particle production at high energies
- 13.30

Break 14.10 – 15.00

Dubna, Russia
Joint Institute for Nuclear Research

September 26, Tuesday
Conference Hall of BLTP JINR
Parallel Session

Hadron spectroscopy

Chairman A. Baldin

- 15.00 **Ganbold G.** (JINR)
Spectrum of mesons, excitations and the glueball
- 15.20 **Narodetskiy I.** (Russia)
Inclusive $\Theta(1540)$ and $\Lambda(1520)$ production
in pp and Σp collisions at high energies
- 15.40 **Rossi P.** (Italy)
Search for Theta+ pentaquark at CLAS
- 16.00 **Shahaliyev Eh.** (JINR)
Statistical fluctuations in spectrum of hadron resonances
- 16.20 **Troyan A.** (JINR)
Baryonic Resonances with Positive Strangeness $S=+1$ in System nK^+
from the Reaction $np \rightarrow npK^+K^-$ at the at Momentum
of Incident Neutrons $P_n=5.20$ GeV/c

Coffee break 17.00 – 17.30

Chairman P. Rossi

- 17.30 **Surovtsev Yu.** (JINR)
The f_0 - and f_2 -families in processes with pseudoscalar mesons.
Lower scalar and tensor glueballs
- 18.10 **Sokolov A.** (Germany/Russia)
PANDA@FAIR – a novel detector for frontier physics
- 18.50 **Ulybyshev M.** (Russia)
Energy levels and wavefunctions of relativistic bound states
of bosons and fermions in potential well
- 19.10 **Zhaugasheva S.** (JINR)
Determination current quark mass in the field correlator method
- 19.30 End of the session

September 26, Tuesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Applied use of relativistic beams

Chairman V. Wagner

- 15.00 **Krivopustov M.** (JINR)
Investigation of generation and multiplication of neutrons and transmutation of
radioactive waste using the in U/Pb assembly "Energy plus transmutation" setup
on the Synchrophasotron/Nuclotron proton beams from 0.7 to 2.0 GeV
- 15.20 **Krivopustov M.** (JINR)
About the first experiment at JINR Nuclotron deuteron beam with
energy 2.52 GeV on investigation of transmutation of I-129, Np-237, Pu-238
and Pu-239 in the field of neutrons generated in Pb-target with U-blanket
- 15.40 **Bielewicz M.** (Poland)
On results of Y-89 irradiation with deuteron beam on U/Pb-assembly
"Energy plus transmutation" using Nuclotron (JINR, Dubna)
- 16.00 **Zhuk I.** (Belarus)
Investigation of neutron generation in the uranium-lead assembly of
electronuclear setup "Energy plus transmutation" bombarded by deuterons
with energy 2.52 GeV
- 16.30 **Svoboda O.** (Czech Republic)
Setup consisting of a Pb/U assembly irradiated
by 2.5 GeV deuterons – first experimental results

Coffee break 17.00 – 17.30**Applied use of relativistic beams**

Chairman I. Zhuk

- 17.30 **Pronskikh V.** (JINR)
Fission of ^{239}Pu in the neutron flux generated in GAMMA-2 setup
on a 1 GeV Nuclotron proton beam
- 17.50 **Pronskikh V.** (JINR)
Modeling of neutron shielding and dose deposited
in tissue-like media by a medical ion beam
- 18.10 **Wagner V.** (Czech Republic)
Spatial distribution of neutrons in the Pb/U assembly irradiated by relativistic
protons - systematics of experimental results
- 18.30 **Majerle M.** (Czech Republic)
MCNPX simulations on the "Energy plus transmutation" assembly
- 18.50 End of the session

September 27, Wednesday
Conference Hall of BLTP JINR
Parallel Session

Relativistic heavy ion collisionsChairman G. Feofilov

- 9.00 **Derkach D.** (Russia)
Analysis of p_T -n correlation in p-p and p-anti p elementary collisions
from AGS to Fermilab energies and projection towards ALICE at the LHC
- 9.20 **Peressounko D.** (Russia)
Direct photons from SPS and RHIC to LHC
- 10.00 **Eliseev S.** (JINR)
Hadron-nuclei and relativistic ions collisions:
Bridging low and high energy processes
- 10.20 **Fedorishin J.** (Slovakia)
Search for the ring-like structures in the angular distributions of secondary
particles emitted in central ^{208}Pb collisions with Ag(Br) nuclei at 158 A GeV/c
- 10.40 **Filatov A.** (Russia)
Vacuum matter creation under action of the inertial mechanism
- 11.00 **Kholodov R.** (Ukraine)
Photoproduction of an electron-positron pair in strong magnetic
field under heavy ion collision

Coffee break 11.20 – 11.50Chairman A. Vodopianov

- 11.50 **Kiselev S.** (Russia)
Direct photons in ion collisions at FAIR energies
- 12.10 **Kolesnikov V.** (JINR)
Study of mesons and light (anti)nuclei production
in A+A collisions at SPS energies
- 12.30 **Malinina L.** (JINR)
A fast Monte Carlo hadron freeze-out generator
- 12.50 **Topil'skaya N.** (Russia)
The medium effects for charmonium states production
in relativistic nucleus-nucleus collisions
- 13.10 **Lyuboshitz V.** (JINR)
The coherent inelastic processes on nuclei at ultrarelativistic energies
- 13.30 **Stadnik A.** (JINR)
Wavelet based algorithm of peak finding in relativistic heavy ion collisions.

Break 13.50 – 15.00

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Joint Institute for Nuclear Research

September 27, Wednesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Structure functions of hadrons and nucleiChairman L. Majling

- 9.00 **Kotikov A.** (JINR)
The k_T -factorization: the contribution of off-shell gluons
to the structure functions F_L , F_2^c and F_2^b
- 9.20 **Petti R.** (CERN), **Kulagin S.** (Russia)
Nuclear pion and shadowing effects on nuclear antiquarks
- 9.40 **Kulagin S.** (Russia)
Modeling neutrino and electron scattering: from high to low Q^2
- 10.00 **Molochkov A.** (Russia)
Relating the sea-quark structure of the deuteron and proton within
the Bethe-Salpeter formalism
- 10.20 **Musulmanbekov G.** (JINR)
On nuclear medium modification of bound nucleons
- 10.40 **Illarionov A.** (JINR)
Small x behavior of structure function in frozen and analytic
versions of strong coupling constant
- 11.00 **Ivanov O.** (JINR)
Direct extraction of transversity and its accompanying T-odd distribution from
the unpolarized and single-polarized Drell-Yan processes

Coffee break 11.20 – 11.50**Studies of exotic nuclei in relativistic beams**Chairman A. Molochkov

- 11.50 **Afanasiev S.** (JINR)
First results on search of η -mesic nuclei in dA-collisions at the Nuclotron
- 12.10 **Levitskaja O.** (Russia)
Comparative properties of projectile fragments produced in peripheral ^{208}Pb
at 158 A GeV and ^{197}Au at 10.7 A GeV interactions with nuclei in emulsion
- 12.30 **Amalsky G.** (Russia)
Probable explanation of extraordinary properties
of 158 A GeV Pb fragments
- 12.50 **Artemenkov D.** (JINR)
Fragmentation of relativistic ^9Be nuclei in nuclear track emulsion
- 13.10 **Rukoyatkin P.** (JINR)
Relativistic secondary fragment beams: a recent practice at LHE
- 13.30 **Orlova G.** (Russia)
Fragmentation of relativistic ^{11}B nuclei in photoemulsion

Break 14.00 – 15.00

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September 27, Wednesday
Conference Hall of BLTP JINR
Parallel Session

Relativistic heavy ion collisionsChairman G. Lykasov

- 15.00 **Nikulin V.** (Russia)
ALICE muon arm: Status and possibilities
for heavy quarkonia photoproduction studies
- 15.30 **Taranenko A.** (USA/Russia)
Scaling properties of elliptic flow at RHIC energies
- 16.00 **Chemezov A.** (Russia)
Modelling of charge-exchange reactions, with account
of the delta-isobar excitation
- 16.20 **Smolyansky S.** (Russia)
Dynamical Casimir effect in an expanding flux tube

Coffee break 16.40 – 17.10Chairman N. Piskunov

- 17.10 **Suleymanov M.** (JINR)
Angular distributions of the particles emitted in hadron-nuclear and nuclear-
nuclear interactions at relativistic energies
- 17.30 **Vechernin V.** (Russia)
On participant number fluctuations for given centrality AA-interactions
in the classical Glauber approach
- 17.50 **Feofilov G.** (Russia)
Multiparticle production in pA and AA collisions
in the framework of modified Glauber model
- 18.10 **Lykasov G.** (JINR)
Charmonium dissociation by mesons and heavy ion collisions
- 18.40 **Okorokov V.** (Russia)
Strange particle femtoscopy in relativistic heavy ion collisions:
Experimental overview
- 19.00 **Pavlovsky O.** (Russia)
Heisenberg picture of the hadron-hadron collision in terms
of chiral fields: role of the shock-waves in the fireball production
- 19.20 End of the session

September 27, Wednesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Studies of exotic nuclei in relativistic beamsChairman G. Orlova

- 15.00 **Majling L.** (Czech Republic)
Hypernuclei ${}^6\text{H}_\Lambda$ and ${}^8\text{H}_\Lambda$ could be identified - so what ?
- 15.40 **Majlingova O.** (Czech Republic)
Study on Kinematic Analysis of Three Particle Decay Based on Dalitz Diagram
- 16.00 **Shchedrina T.** (JINR)
Peripheral interactions of relativistic ${}^{14}\text{N}$ nuclei with emulsion nuclei
- 16.20 **Stanoeva R.** (JINR)
Peripheral fragmentation of the ${}^8\text{B}$ nuclei fragmentation
at energy of 1.2-AGeV in nuclear track emulsion

Coffee break 16.40 – 17.10Chairman I. Boguslavsky**Progress in experimental studies at the high energy accelerators**

- 17.10 **Karachuk J.** (JINR)
Asymptotic behavior of pion clusters in different nuclear reactions
- 17.30 **Krasnov V.** (JINR)
The design of the laser-based calibration system of DELTA spectrometer
- 17.50 **Maksimchuk A.** (JINR)
Particle identification system of spectrometer NIS
- 18.10 **Yudin I.** (JINR)
Distribution of the magnetic field of the spectrometric setup MARUSYA
- 18.50 End of the session

September 28, Thursday
Conference Hall of BLTP JINR
Parallel Session

Polarization phenomena and spin physicsChairman M. Sapozhnikov

- 9.00 **Alexakhin V.** (JINR)
Polarization of Lambda and anti-Lambda hyperons
in deep-inelastic scattering at COMPASS
- 9.20 **Kaloshin A.** (Russia)
Dressed propagator of the Rarita-Schwinger field
and the process $\pi N \rightarrow \Delta(1232) \rightarrow \pi N$
- 9.40 **Filatov Yu.** (JINR)
Spin polarization preservation during spin resonance crossing
- 10.00 **Glagolev V.** (JINR)
The charge - exchange reaction $dp \rightarrow (pp)n$
- 10.20 **Pestov Iv.** (JINR)
Spin and Geometry

Coffee break 11.00 – 11.30Chairman V. Ladygin

- 11.30 **Tomasi-Gustafsson E.** (France)
Model independent considerations on two-photon exchange in electron proton
scattering and in the crossed processes
- 11.50 **Bystritskiy Yu.** (JINR)
Radiative corrections to e-p scattering: solving the Ge/Gm discrepancy
- 12.10 **Nurushev S., Okorokov V.** (Russia)
Spin matrix elements for the elastic proton-proton
and proton-antiproton collisions
- 12.30 **Shikhalev M.** (JINR)
Deuteron polarization observables in elastic dp scattering
at intermediate energies
- 12.50 **Kurilkin P.** (JINR)
Measurement of the vector and tensor analyzing power
for the dp elastic scattering at the energy of 880 MeV
- 13.10 **Efremov A.** (JINR)
Collins effect in SIDIS and in electron-positron-annihilation
- 13.30 **Zemlyanichkina E.** (JINR)
New results on the deuteron spin-dependent
structure function g_1^d from COMPASS

Break 13.50 – 15.00

Dubna, Russia
Joint Institute for Nuclear Research

September 28, Thursday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Structure functions of hadrons and nucleiChairman S. Kulagin

- 9.00 **Zotov N.** (Russia)
Prompt photon production in the k_T -factorization approach
- 9.20 **Rogochaya E.** (JINR)
On electrodisintegration of the deuteron in Bethe-Salpeter formalism
- 9.40 **Krivenko-Emetov Ya.** (Ukraine)
Electron-deuteron elastic scattering beyond one photon exchange
- 10.00 **Semikh S.** (JINR)
Peculiarities in the structure of two-particle states
within the Bethe-Salpeter Approach
- 10.20 **Radzhabov A.** (JINR)
 $\pi\pi$ scattering in a nonlocal Nambu - Jona-Lasinio model

Coffee break 11.00 – 11.30

Dubna, Russia
Joint Institute for Nuclear Research

September 28, Thursday
Conference Hall of BLTP JINR
Plenary Session

Polarization phenomena and spin physics

Chairman A. Efremov

- 15.00 **Punjabi V.** (USA)
Current understanding of the proton form factor JLab results
- 15.40 **Ladygin V.** (JINR)
Recent results from VBLHE-JINR on few-nucleon systems structure
- 16.20 **Zolin L.** (JINR)
Nuclotron experiment to study the tensor polarizability of deuteron beam passing through a target matter

Coffee break 16.40 – 17.10

Chairman V. Punjabi

- 17.10 **Gurchin Yu.** (JINR)
Detector preparation for internal target station at Nuclotron.
Target position monitor for internal target
- 17.30 **Janek M.** (JINR)
The search of charge symmetry breaking for $dd \rightarrow {}^3\text{He} n$ and $dd \rightarrow {}^3\text{H} p$ reactions at 270 MeV
- 17.50 **Vasiliev T.** (JINR)
Deuterons spin structure investigation by means of vect(d)d \rightarrow pT analyzing powers measurements at 270 MeV
- 18.10 **Kurilkin A.** (JINR)
Measurement of the tensor and vector analyzing power for the $dd \rightarrow {}^3\text{H}p$ reactions at the energy 200 MeV
- 18.30 **Kiselev A.** (JINR)
The tensor analyzing power T_{20} for ${}^{12}\text{C}(d,p){}^{13}\text{C}$ and $d(d,p)X$ reactions at energy $T_d = 140, 200$ and 270 MeV at emission angle $\Theta(\text{cm})=0$
- 18.50 End of the session

Dubna, Russia

Joint Institute for Nuclear Research

September 29, Friday
Conference Hall of BLTP JINR
Plenary Session

Progress in experimental studies at the high energy accelerators

Chairman A. Malakhov

- 9.00 **Shimanskiy S.** (JINR)
Quark-gluon phases of the nuclear matter
II. The hot quark-gluon phase and the QGP finding
- 9.20 **Ierusalimov A.** (JINR)
Low-mass $M < 1.2 \text{ GeV}/c^2$ σ_0 -mesons produced in $\pi^+ \pi^-$ systems in $np \rightarrow np \pi^+ \pi^-$ reactions at $P_n = 5.20 \text{ GeV}/c$
- 9.40 **Lapidus K.** (Russia)
Dilepton emission from the mixed phase of nuclear matter
- 10.00 **Borodina O.** (JINR)
Events reconstruction for experiment NIS at Nuclotron
- 10.20 **Sissakian A., Sorin A.** (JINR)
Searching for the mixed phase of strongly interacting matter at JINR: from Nuclotron towards collider
- 10.40 **Abraamyan Kh.** (JINR)
Observation of new resonance structure in the invariant mass spectrum of two gamma-quanta in dC-interactions at momentum 2.75 GeV/c per nucleon

Coffee break 11.00 – 11.20

Chairman A. Sorin

- 11.20 **Azhgirey L.** (JINR)
Proposal of the experiment on investigation of (d,p) reaction on the extracted deuteron beam of the U-70 accelerator
- 11.40 **Slowinski B.** (Poland)
Average profiles and fluctuations of electromagnetic cascades in dense amorphous media
- 12.00 **Ippolitov M.** (Russia)
The ALICE electromagnetic calorimeter
- 12.20 **Baldina E.** (JINR)
Some problems of scaling and self-similarity in relativistic physics
- 12.40 **Ladygina N.** (JINR)
Deuteron-neutron charge exchange reaction $dn \rightarrow p(nn)$ at small momentum transfer
- 13.00 **Strunov L.** (JINR)
Measurements of neutron-proton spin observables at 0° using highest energy polarized d, n probes
- 13.30 **Sharov V.** (JINR)
Experimental results on ratio R_{dp} of the yields of elastic np charge exchange process on H2 and D2 targets at 0° over 0.8 - 2.0 GeV region of neutron beam energy

Break 14.00 – 15.00

Dubna, Russia

Joint Institute for Nuclear Research

September 29, Friday
Conference Hall of BLTP JINR
Plenary Session

Progress in experimental studies at the high energy accelerators

Chairman L. Azhgirey

- 15.00 **Beier Th.** (Germany)
FAIR - Status of the new accelerator facility for all ion species and antiprotons
- 15.40 **Perdrisat C.** (USA)
The physics program after the 12 GeV upgrade at JLab
- 16.20 **Machner H.** (Germany)
Recent investigations at COSY
- 17.00 End of the session
- 17.00 **Farewell Party (BLTP)**

September 30, Saturday
Conference Hall of BLTP JINR
Plenary Session

Progress in experimental studies at the high energy accelerators

Chairman E. Tomasi-Gustafsson

- 9.00 **Vokal S.** (JINR)
Last selected results of the VBLHE JINR
- 9.40 **Sadovsky S.** (Russia)
Conception of relativistic ion program at U70 accelerator
- 10.00 **Krasavin E.** (JINR)
Nuclotron as a unique tool for modeling biological effects
- 10.20 **Zarubin P.** (JINR)
Prospects of studies of multi-body nuclear states in peripheral interactions of relativistic nuclei
- 11.00 **Sissakian A.** (JINR)
Closing
- 11.20 **Coffee**