

September 29, Monday
Conference Hall of BLTP JINR
Plenary Session

Chairman V. Kadyshovsky

10.00 **Burov V., Malakhov A.** (JINR)
Opening

10.20 **Sissakian A.** (JINR)
M.A. Markov and JINR

Quantum Chromodynamics at the Large Distances

10.40 **Prokhorov L.** (Russia)
On Fractioning of Quanta: Electrons and Neutrons

Coffee break 11.00 – 11.30

Chairman V. Burov

11.30 **Musakhanov M.** (Uzbekistan)
Low energy constants of ChPT from the instanton vacuum model

12.10 **Kukulín V.** (Russia)
Non-nucleonic degrees of freedom and formation
of mixed phase embryos in cold nuclei

12.40 **Konopleva N.** (JINR)
Physics and Geometry

Break 13.10 – 14.30

Progress in experimental studies at the high energy accelerators

Chairman A. Malakhov

14.30 **Punjabi V.** (USA)
Proton Form Factor Measurements to Large Four Momentum
Transfer Q^2 at Jefferson Lab

15.10 **Perdrisat C.F.** (USA)
Experimental check of the Born approximation in elastic ep scattering

15.30 **Munoz C. C.** (France)
The GPD experimental program at Jefferson Lab

Break 16.10 – 16.20

September 29, Monday
Conference Hall of BLTP JINR
Plenary Session

Relativistic Heavy Ion Collisions

Chairman A. Kurepin

16.20 **Borodina O.** (Germany)
HypHI Phase 0 Experiment. Hypernuclei Spectroscopy at GSI

16.40 **Pantuev V.** (USA)
Relativistic Heavy Ions Collisions at PHENIX

17.20 **Kiselev S.** (Russia)
Fast generators of direct photons

18.00 **Baldin A.** (JINR)
Relativistic Multiparticle Interactions in Lobachevsky Geometry.
Directed Nuclear Radiation

18.20 End of the session

19.00 **Welcome Party (BLTP Cafeteria)**

September 30, Tuesday
Conference Hall of BLTP JINR
Parallel Session

Relativistic Heavy Ion Collisions

Chairman C. Perdrisat

- 9.00 **Kistenev Ed.** (USA)
QCD in electron-ion collisions at the future e-RHIC complex
- 9.40 **Pondrom L. G.** (USA)
Search for quark substructure in dijet angular distribution at 1.96 TeV
- 10.20 **Yurevich V.** (JINR)
Neutron Emission and Evolution of Hot Nuclei Formed in High-Energy Reactions
- 10.40 **Fedorishin Jan** (Slovakia)
Continuous wavelet analysis of model heavy ion data

Coffee break 11.20 – 11.50

Hadron spectroscopy

Chairman S. Gerasimov

- 11.50 **Aslanyan P.** (JINR)
Recent results from observation of multibaryons states with Λ -hyperons and K^0_S systems at 10 GeV/c
- 12.10 **Barabanov M.** (JINR)
Search for the Radial Excited States of Charmonium in Experiments Using Low Energy Antiproton Beams with Momentum Ranging from 1 GeV/c to 15 GeV/c.
- 12.30 **Dineykhani M.** (JINR)
Determination of the odderon mass spectrum with relativistic corrections
- 12.50 **Tomasi-Gustafsson E.** (France)
Cross-section reanalysis of the $\gamma N \rightarrow N\pi\pi$ reaction measured at MAMI
- 13.10 **Karmanov V.** (Russia)
Manifestation of Three-body Forces in Bethe-Salpeter and light-front equation
- 13.30 **Amalsky G.** (Russia)
Explanation of Unusual $np \rightarrow np\pi^+\pi^-$, $np \rightarrow npK^+K^-$ Reactions at $P_n \approx 5.2$ GeV/c by Model of Rotary Two-nucleons System

Break 13.50 – 15.00

September 30, Tuesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Multiparticle dynamics

Chairman M. Tokarev

- 9.00 **Kokoulina E.** (JINR)
The extreme multiplicity at high energies
- 9.20 **Alakhverdyan A.** (JINR)
Combined Kinematical and Topological Method for Reconstruction of Neutral Strange Particles
- 9.40 **Zborovsky I.** (Czech Republic)
Self-Similarity of Particle Production in Soft and Hard P_T Region
- 10.20 **Makhaldiani N.** (JINR)
Renormdynamic equations and scaling functions of multi particle production
- 10.40 **Bunzarov I.** (JINR)
Event Structure of pC , dC , αC and CC Collisions at Incident Momentum 4.2 GeV/c per Nucleon in Pt Space
- 11.00 **Baldina El.** (Russia)
Study of Exotic States of Nuclear Matter Based on Lobachevsky Geometry. Separation of Narrow Resonances. Data base of Experiments with Bubble Chambers

Coffee break 11.20 – 11.50

Chairman E. Kokoulina

- 11.50 **D'yachenko A.** (Russia)
Spectra of the fast subthreshold pions, produced in nucleus-nucleus collisions
- 12.10 **Tokarev M.** (JINR)
QCD Test of Z-Scaling for JET Production at TEVATRON and RHIC
- 12.30 **Dmitriev V.** (Russia)
Kinetic Description of W and Z Boson Vacuum Creation in the Early Universe
- 12.50 **Tarakanov A.** (Russia)
Kinetics of Parton- Antiparton Plasma Vacuum Creation in the Time-Dependent Chromo-Electric Fields of Arbitrary Polarization
- 13.20 **Egorov O.** (Russia)
Cumulative protons yield after K^+ interactions in CH target

Break 13.40 – 15.00

September 30, Tuesday
Conference Hall of BLTP JINR
Parallel Session

Polarization phenomena and spin physics

Chairman G. Rupp

- 15.00 **Alexakhin V.** (JINR)
Longitudinal Spin Transfer to the Lambda and antiLambda
- 15.20 **Plis Yu.** (JINR)
A Proposal of Polarized ${}^3\text{He}^{++}$ Ion Source for NUCLOTRON-M
- 15.40 **Chavleshvili M.** (JINR)
Symmetry and Kinematics for Spin Particle Reactions
- 16.00 **Klopot Ya.** (JINR)
Axial anomaly and mixing of pseudoscalar mesons
- 16.20 **Cherednikov I.** (JINR)
Recent progress in transverse-momentum dependent PDF's
- 16.40 **Tanida K.** (Japan)
Challenging nucleon spin - a report from the PHENIX

Coffee break 17.00 – 17.30

Hadron spectroscopy

Chairman G. Efimov

- 17.30 **Surovtsev Yu.** (JINR)
Evidence for $K^0(900)$ and Model-Independent
Analysis Indications of the Scalar-Mesons Nature
- 18.00 **Korchin A.** (Ukraine)
Resonance Chiral Theory and meson production
in electron-positron annihilation
- 18.30 **Henner V.** (Russia)
Analysis of the R Measurements of Higher Vector States of Charmonium
- 18.50 **Troyan A.** (JINR)
Search for and Study of Low-Mass Scalar Mesons
in the Reaction $n p \rightarrow n p \pi^+ \pi^-$ at the Impulse of Neutron Beam 5.20 GeV/c
- 19.10 End of the session

September 30, Tuesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Multiparticle dynamics

Chairman I. Zborovsky

- 15.00 **Abramovsky V.** (Russia)
Total Cross Sections of Hadron-Hadron Interactions
and Multiplicity Distribution of Secondary Hadrons
at LHC Energy
- 15.30 **Feofilov G.** (Russia)
Long-Range Multiplicity Correlations for pp-Collisions
at ALICE experiment at the LHC
- 15.50 **Machner H.** (Germany)
The NN and NY Interactions at Small Energies
- 16.30 **Bubelev En.** (JINR)
From Blokhintsev heuristic nucleon kernel to Fundamental inverse scattering
problem in the widened Lobachevsky-Kotelnikov world of motions

Coffee break 17.00 – 17.30

Applied use of relativistic beams

Chairman I. Zhuk

- 17.30 **Glagolev V.** (JINR)
Space correlations in pionless interactions of light nuclei with protons
- 17.50 **Pronskikh V.** (JINR)
Transmutation of ${}^{129}\text{I}$ in Secondary Neutrons
of GAMMA Setup Exposed to 2.33 GeV Deuterons:
Experiment and Modeling
- 18.10 **Svoboda O.** (Czech Republic)
Measurements of cross-sections of neutron threshold reactions and their usage
in high energy neutron measurements at "Energy plus Transmutation"
- 18.30 **Slowinski Br.** (Poland)
Fluctuation in Electromagnetic Cascades Produced
by Gamma-Quanta of 100-3500 MeV Energy in Dense Amorphous Media
- 18.50 **Batusov Yu.** (JINR)
Investigation of fast neutron spectrum in the uranium assembly of the
experimental set-up "Energy plus transmutation" in the JINR Nuclotron proton
beam at an energy of 1.5 GeV
- 19.10 End of the session

October 1, Wednesday
Conference Hall of BLTP JINR
Plenary Session

Hadron spectroscopy

Chairman Yu. Uzikov

- 9.00 **Efimov G.** (JINR)
Confinement and meson masses
- 9.40 **Rupp G.** (Portugal)
Multichannel calculation of light and intermediate scalar mesons
- 10.20 **Itahashi K.** (Japan)
Pionic atom factory project at RIBF
- 10.40 **Dorkin S.** (JINR)
Recent results on the solving of Bethe-Salpeter equation for spinor particles

Coffee break 11.00 – 11.30

Polarization phenomena and spin physics

Chairman E. Strokovsky

- 11.30 **Shimanskiy S.** (JINR)
Prospects for Constituent(Color) Quark Condensate of nuclear matter study at nuclotron and ...
- 11.50 **Ladygina N.** (JINR)
Deuteron-proton elastic scattering in energy range from 500 MeV up to 1200 MeV
- 12.10 **Silenko A.** (Republic of Belarus)
Possibility of measurement of the tensor electric and magnetic polarizabilities of the deuteron and other nuclei in experiments with polarized beams
- 12.30 **Kurilkin A.** (JINR)
The angular dependences of the vector and tensor analyzing powers in the $dd \rightarrow {}^3\text{He}p$ and $dd \rightarrow {}^3\text{He}n$ reactions at 200 and 270 MeV
- 12.50 **Kurilkin P.** (JINR)
Analyzing powers measurement for d-p elastic scattering at the energies 880 and 2000 MeV
- 13.10 **Pestov I.** (JINR)
Spin physics and Self-Organization of Physical Fields
- 13.30 **Shindin R.** (JINR)
Separation of Flip and Non-Flip parts of $np \rightarrow pn$ Charge Exchange at energies $T_n = 0.5\text{-}2.0$ GeV

Break 13.50 – 15.00

October 1, Wednesday
Conference Hall of BLTP JINR
Parallel Session

Polarization phenomena and spin physicsChairman N. Piskunov

- 15.00 **Nurushev S.** (Russia)
Overview on the Gluon Polarization Experiments
- 15.20 **Ladygin V.** (JINR)
Study of 2N and 3N short-range correlations at Nuclotron-M
- 15.40 **Teryaev O.** (JINR)
T-odd distribution functions, formfactors and duality
- 16.20 **Lyuboshitz V.** (JINR)
Spin correlations of muons produced in the annihilation process $e^+ e^- \rightarrow \mu^+ \mu^-$

Coffee break 16.50 – 17.20Chairman S. Nurushev

- 17.20 **Titov A.** (JINR)
Exclusive charm production in (bar)pp collisions
- 17.40 **Tomasi-Gustafsson E.** (France)
Polarization observables in annihilation and scattering reactions
- 18.00 **Chetvertkova V.** (Russia)
The possibility of producing the polarized proton beam using the internal production target in the accelerators/colliders
- 18.20 End of the session
- 19.00 **Concert (International Conference Hall)**

October 1, Wednesday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Applied use of relativistic beamsChairman V. Glagolev

- 15.00 **Slowinski Br.** (Poland)
Generation of Neutrons in Heavy Extended Targets by Elections of Energy from 30 MeV to 1000 MeV
- 15.30 **Krivopustov M.** (JINR)
Investigation of transmutation of radioactive waste (I-129, Np-237, Pu-238, Pu-239 and Am-241) of atomic energetic at proton and deuteron beams of Synchrophasotron and Nuclotron JINR (10-year experience on Dubna base)
- 15.50 **Yordanov O.** (Bulgaria)
Isotope Production Rates in the Lead Target of the “Energy plus Transmutation”-Setup in the Reaction D+Pb at 2.52 GEV
- 16.10 **Potapenko A.** (Republic of Belarus)
Experimental and Monte Carlo studies on the calibration factor of the mica detectors with lead radiators in the experiments on “Energy plus Transmutation”-Setup
- 16.30 **Bielewicz M.** (Poland)
Experiments of High Energy Neutron Spectrum Investigation on U/Pb Assembly Using 1.60 GeV and 2.52 GeV Deuteron Beam from JINR NUCLOTRON (DUBNA)

Coffee break 16.50 – 17.20**Applied use of relativistic beams**Chairman M. Krivopustov

- 17.20 **Zhuk I.** (Republic of Belarus)
Studying of neutron fields in the “Gamma-MD” setup in LPHE JINR (Dubna) under 2.33 GeV deuteron irradiation
- 17.40 **Khilmanovich A.** (Republic of Belarus)
Lead/Graphyte -assembly Gamma-MD for investigation of transmutation of radioactive waste irradiated by deuteron beam with energy 2.33 GeV of the LHEP Nuclotron (JINR, Dubna)
- 18.00 End of the session
- 19.00 **Concert (International Conference Hall)**

October 2, Thursday
Conference Hall of BLTP JINR
Parallel Session

Relativistic heavy ion collisions

Chairman G. Feofilov

- 9.00 **Khvorostukin A.** (JINR)
Relativistic Mean-Field Model with Scaled Hadron Masses and Couplings
- 9.20 **Suleimanov M.** (JINR)
Novel approach to the analysis of nucleus-nucleus collisions at relativistic energies
- 10.00 **Eliseev S.** (JINR)
Role of hadron formation time: from particles-nuclei to relativistic ion collisions
- 10.20 **Kochebina O.** (Russia)
J/psi suppression, percolation model and the critical energy density in AA collisions at SPS and RHIC energies with the account of centrality
- 10.40 **Zanevsky Yu.** (JINR)
Development, construction and test of TRD ALICE chambers at JINR. Further R&D for fast TRD detectors

Coffee break 11.00 – 11.30

Chairman O. Teryaev

- 11.30 **Sumbera M.** (Czech Republic)
Study of Nuclear Suppression at Large Forward Rapidities in D+AU Collisions at RHIC
- 11.50 **Kolevatov R.** (Russia)
Mass hierarchy of collisional energy loss
- 12.10 **Mikhailov K.** (Russia)
Source size measurements in the $e\text{He} \rightarrow e'p$ Lambda X reaction
- 12.30 **Skachkov N.** (JINR)
Study of isolated photon with associated jet production at D0
- 12.50 **Stavinskiy A.** (Russia)
Different decay modes for omega and phi in AA collisions
- 13.10 **Averyanov A.** (JINR)
NIS-GIBS spectrometer starts hypernuclei research with Nuclotron ${}^6\text{Li}$ beam

Break 13.30 – 15.00

October 2, Thursday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Structure functions of hadrons and nuclei

Chairman V. Lukyanov

- 9.00 **Bondarenko S.** (JINR)
Extended Siegert theorem in the relativistic investigation of the deuteron photodisintegration reaction
- 9.20 **Sokolov M.** (Russia)
String Fragmentation and Rapidity Distributions in Proton-Proton Collisions
- 9.40 **Vechernin V.** (Russia)
Space-Time Picture of String Fragmentation and the Fusion of Colour Strings
- 10.00 **Patsyuk M.** (JINR)
Extraction of Gluon Distribution Functions from Muon Spectrometer Data of ALICE
- 10.20 **Kotikov A.** (JINR)
Small-x behavior of parton densities at low Q^2 values
- 10.40 **Tsirova N.** (Russia)
Deuteron and Pion form factors at High Momentum Transfer and JLab Experiments

Coffee break 11.00 – 11.30**Studies of exotic nuclei in relativistic beams**

Chairman A. Baldin

- 11.30 **Artemenkov D.** (JINR)
Fragmentation of relativistic nuclei in peripheral interactions in nuclear track emulsion
- 12.10 **Gmuca St.** (Slovakia)
Mapping of the Fock exchange term onto relativistic mean field model
- 12.30 **Shchedrina T.** (JINR)
Clustering features of ${}^{14}\text{N}$ in relativistic multifragmentation process
- 12.50 **Rukoyatkin P.** (JINR)
Secondary fragment beams for studies of light nuclei structure using the emulsion technique at the LHEP facilities
- 13.10 **Majlingova O.** (Czech Republic)
Delayed clusters accompanying non mesonic weak decay of the hypernuclei
- 13.30 **Kulikov V.** (Russia)
Momentum Spectra of Hydrogen and Helium Isotopes from ${}^{12}\text{C}$ Fragmentation

Break 13.50 – 15.00

October 2, Thursday
Conference Hall of BLTP JINR
Parallel Session

Quantum Chromodynamics at the Large DistancesChairman A. Korchin

- 15.00 **Gerasimov S.** (JINR)
Where is the 0^{++} glueball?
- 15.40 **Bogolubsky I.** (JINR)
Lorentz gauge propagators in IR gluodynamics
- 16.00 **Pivovarov A.** (Russia)
Kaon wave function at NNLO in QCD
- 16.20 **Anikin I.** (JINR)
Duality and factorization theorem in QCD
- 16.40 **Dorokhov A.** (JINR)
Rare decay π^0 to ee as a filter for low mass dark matter

Coffee break 17.00 – 17.30Chairman A. Pivovarov

- 17.30 **Skachkova A.** (JINR)
Lepton pair production at intermediate energies
- 17.50 **Solovtsova O.** (Republic of Belarus)
A nonperturbative calculation for the Adler function with Borel resummation
- 18.10 **Kosmachev O.** (JINR)
Unstable leptons and structure quantum numbers
- 18.30 **Koryakin V.** (Russia)
The confinement and the dark matter of the Universe
- 18.50 End of the session

October 2, Thursday
Blokhintsev Auditorium of BLTP JINR
Parallel Session

Polarization phenomena and spin physicsChairman A. Vodopianov

- 15.00 **Kochelev N.** (JINR)
Nonperturbative QCD effects in high energy quark-quark scattering induced by instantons
- 15.20 **Zemlyanichkina E.** (JINR)
Valence Quark Helicity Distribution from Compass
- 15.40 **Piyadin S.** (JINR)
Status of preparation to study reaction dp – breakup
- 16.00 **Strunov L.** (JINR)
Search for the $NN \rightarrow 6q$ phase transition in the np -polarized measurements at $T_{kin}=1-6$ GeV
- 16.40 End of the session

Coffee break 17.00 – 17.30Chairman A. Kovalenko**Relativistic Heavy Ion Collisions**

- 17.30 **Khrykin A.** (JINR)
On a missed source of dielectrons in heavy-ion collisions
- 17.50 **Malinina L.** (JINR)
HYDJET++ the new model for study heavy ion collisions
- 18.10 **Parvan A.** (JINR)
Walecka model with fractional exclusion statistics
- 18.30 **Skachkova A.** (JINR)
Hadronic jets and search for stop quarks at ILC
- 18.50 End of the session

October 3, Friday
Conference Hall of BLTP JINR
Plenary Session

Progress in experimental studies at the high energy accelerators

Chairman T. Hallman

- 9.00 **Sissakian A. and Sorin A.** (JINR)
Nuclotron-based Ion Collider Facility (NICA) at JINR:
New Prospect for Heavy Ion Collisions and Spin Physics
- 9.30 **Kekelidze V.** (JINR)
Status Report on Multipurposed Detector (MPD)
and Spin Physics Detector (SPD)
- 10.00 **Abraamyan Kh.** (JINR)
A resonance structure in the $\gamma\gamma$ invariant mass spectrum
in pC- and dC-interactions
- 10.20 **Zinchenko A.** (JINR)
Track Reconstruction in the MPD Detector at NICA
- 10.40 End of the session

Coffee break 11.00 – 11.30

Chairman Br. Slowinski

- 11.30 **Ierusalimov A.** (JINR)
Application of ASME Method for Particle Reconstruction
- 12.10 **Krasnov V.** (JINR)
Results of the tests of detectors for photon detection
- 12.30 **Livanov A.** (JINR)
Design and parameters of the fiber optics multilayer
scintillating spectrometer at the JINR Nuclotron internal target
- 12.50 **Sharov V.** (JINR)
Measurements of the Ratio R_{dp} of the Quasi-Elastic
 $nd \rightarrow p(nn)$ to the Elastic $np \rightarrow pn$ Charge-Exchange Process Yields at 0° Over
0.55 - 2.0 GeV Neutron Beam Energy

Break 13.10 – 15.00

October 3, Friday
Conference Hall of BLTP JINR
Plenary Session

**Progress in experimental studies at the high energy accelerators,
Cumulative processes**

Chairman S. Vokal

- 15.00 **Lukyanov V.** (JINR)
Calculations of the K^+ -Nucleus Microscopic Optical Potential
and of the Corresponding Differential Elastic Cross Sections
- 15.20 **Kobushkin A.** (Ukraine)
Two-photon exchange and polarization physics in electron-proton scattering
- 15.50 **Lapidus K.** (Russia)
Dielectron Production in pp and dp Collisions
at 1.25 GeV/u with HADES
- 16.10 **Sharkov G.** (Russia)
Preliminary results of FLINT

Coffee break 16.40 – 17.10

Chairman V. Burov

- 17.10 **Smirnov V.** (JINR)
Numerical Modeling of 3D Field Distribution of the SP-57 Magnet
for the MARUSYA setup with Two Scalar Potential Method
- 17.30 **Uzikov Yu.** (JINR)
Dynamics of 1S0-diproton formation in the reactions
 $pp \rightarrow (pp)_s \pi^0$ and $pp \rightarrow (pp)_s \gamma$ in the GeV region
- 17.50 End of session
- 19.00 Farewell Party (International Conference Hall)**

October 4, Saturday
Conference Hall of BLTP JINR
Plenary Session

Progress in experimental studies at the high energy accelerators

Chairman E. Tomasi-Gustafsson

- 9.00 **Sakuma F.** (Japan)
The search for deeply-bound kaonic nuclear states at J-PARC
- 9.20 **Marchand D.** (France)
PANDA@FAIR Physics program
- 9.50 **Hallman T.** (USA)
Characterizing the new state of strongly interacting
quark-gluon matter discovered at RHIC
- 10.30 **Vodopianov A.** (JINR)
The ALICE experiment at LHC
- 11.00 **Burov V., Malakhov A.** (JINR)
Closing
- 11.10 **Coffee**