September 10, Monday VBLHEP Conference Hall Plenary Session

10.00 Itkis Mikhail (JINR), Prokh Valery (Russia) Opening

<u>Chairman</u> Itkis M.

Progress in experimental studies in the high energy centers

- 10.20 *Pondrom Lee (USA)* Search for double partons at CDF
- 10.50 **Photo**

Coffee break 11.00 – 11.30

Chairman Burov.V.

- 11.30 Lanyov Alexander (JINR)
 Overview of recent CMS results at sqrt(s) = 7 and 8 TeV
- 12.10 *Cheplakov Alexander (JINR)* Status and Recent Results of the ATLAS Experiment

Break 12.50 – 15.00

Quantum chromodynamics at large distances

Chairman Malakhov A.

15.00 *Musakhanov Mirzayusuf (Uzbekistan)* QCD in infrared region and spontaneous breaking of the chiral symmetry
15.40 *Konopleva Nelly (Russia)*

Gauge field mass problem in new aspect

16.00 *Burov Valery (JINR)* Relativistic theory of nucleon-nucleon interaction

Coffee break 16.40 – 17.10

September 10, Monday VBLHEP Conference Hall Plenary Session

Structure functions of hadrons and nuclei

<u>Chairman</u> Tatischeff B.

Bondarenko Serge (JINR)
Effects of the final-state interaction for the exclusive deuteron
electrodisintegration
Karmanov Vladimir (Russia)
Solving Bethe-Salpeter equation for the scattering states
Bolzoni Paolo (Germany)
Timelike structure functions and hadron multiplicities
Pacetti Simone (Italy)
Time-like and space-like electromagnetic form factors of nucleons, a unified
description

- 18.50
- 19.00 Welcome party

September 11, Tuesday VBLHEP Conference Hall Plenary Session

Relativistic heavy ion collisions

Chairman Pondrom L.

- 9.00 *Evdokimov Olga (USA)* Resent heavy ion results from STAR
- 9.40 *Pantuev Vladislav (Russia)* Recent results from Phenix experiment at RHIC
- 10.20 *Kugler Andrej (Czech Republic)* HADES experiments investigating in-medium hadron properties

Coffee break 11.00 – 11.30

Hadron spectroscopy, multiquarks

<u>Chairman</u> Karmanov V.

- 11.30 *Tatischeff Boris (France)* What do fractals learn us concerning fundamental particle masses and hadron masses?
 12.10 *Surovtsev Yury (JINR)*
- Combined analysis of processes pi pi -> pi pi K bar-K, eta eta and J/psi decays and parameters of scalar mesons
- 12.50 *Ivanov Mikhail (JINR)* Multiquark states in the covariant quark confinement model

Break 13.30 - 15.00

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September 11, Tuesday VBLHEP Conference Hall Parallel Session A

Hadron spectroscopy, multiquarks

Chairman Obukhovsky I.

- 15.00 *Faustov Rudolf (Russia)* Spectroscopy and regge trajectories of heavy quarkonia and Bc mesons
- 15.40 *Ganbold Gurjav (JINR)* Infrared confinement and meson spectroscopy
- 16.00 *Dineykhan Minal (JINR)* Determination of mass spectrum and decay constants mesons

Coffee break 16.20 – 17.10

Hadron spectroscopy, multiquarks

Chairman Faustov R.

17.10 *Obukhovsky Igor (Russia)*Quark and hadron degrees of freedom in the Roper resonance electroproduction
17.30 *Jerusalimov Alexander (JINR)*

Elastic scattering in np-interactions at intermediate energies

17.50 **Zhevlakov Alexey (Russia)** Contribution to anomalous magnetic moment of muon from light-by-light processes with intermediate scalar and pseudoscalar states in nonlocal quark model

18.30

September 11, Tuesday Auditorium 347 Parallel Session B

Quantum chromodynamics at large distances

Chairman Vechernin V.

- 15.00 *Eliseev Sergey (JINR)* The signals of partial restoration of chiral symmetry in medium at intermediate energy: experimental data vs. theory
- 15.20 *Mayburov Sergey (Russia)*Fuzzy geometry and large distance gauge fields
 15.40 *Koryukin Valery (Russia)*
- Quasi-group symmetries, stochastic processes and the hadron stability
- 16.00 *Kosmachev Oleg (JINR)* On the possibility of massless neutrino oscillations

Coffee break 16.20 – 17.10

Quantum chromodynamics at large distances

Chairman Ilgenfritz E.-M.

17.10 *Fadeev Nikolay (JINR)*The way for estimation of the space-time particle production volume in particle collisions

17.30 *Bubelev Engely (JINR)*

Lobachevsky geometry true sence and "Lobachevsky genera education" urgency in high energy physics

17.50 Tarantin Nikolai (JINR)

Possible interpretation of the puzzier at the LHC so-called "ridge"-effect new consideration of pairing and residual interactions in of nucleons in atomic nuclei and the new scenario of the synteze of p-nuclei in universe

18.10 Machavariani Alexander (JINR)

Field theoretical approach to the NN-NN pi and Nd-NN systems with and without quarks-gluon degrees of freedom

18.40

September 12, Wednesday VBLHEP Conference Hall Parallel Session A

Dynamics of multiparticle production

Chairman Smolyansky S.

9.00	Tokarev Mikhail (JINR)
	Z-scaling: inclusive jet spectra at RHIC, TEVATRON and LHC
9.40	Dedovich Tatjana (JINR)

BC, PaC and SePaC methods for fractal analysis of events 10.00 *Aparin Alexey (JINR)*

Self-similarity of high-P_t hadron production in pA collisions

10.20 Makhaldiani Nugzar (JINR)

Renormdynamics, coupling constant unification and universal properties of the multiparticle production

Coffee break 11.00 - 11.30

Dynamics of multiparticle production

<u>Chairman</u> Tokarev M.

11.30	Smolyansky Stanislav (Russia)
	The photon cluster excitation mechanism of the e-e+ plasma created from
	vacuum in a strong electromagnetic field

11.50 *Abramovsky Victor (Russia)* Comparison of the data on proton-proton and proton-antiproton interactions at high energies on basis of the Low Constituents Number Model

12.30 Abramovskaya Natalia (Russia)

Comparison of the triggers of the ATLAS, ALICE and CMS experiments and the trigger of the UA1 experiment. Analysis of proton-proton and protonantiproton interactions on basis of the MC event generator Pythia

12.50 Vechernin Vladimir (Russia)

The dependence of the number of pomerons on the impact parameter and the long-range rapidity correlations in pp collisions

13.10 Vasiliev Taras (JINR)

Study of the high pT pion and strangeness production in heavy ion collisions for the experiments with fixed target

September 12, Wednesday Auditorium 347 Parallel Session B

Chairman Baldin A.

Applied use of relativistic beams

9.00 Furman Walter (JINR)

Study of ads with 500kg natural uranium target irradiated by deuterons with

energies from 1 to 8 GeV at JINR NUCLOTRON

- 9.40 Kilim Stanislaw (Poland) Irradiation history and resulting isotope decay scheme influence on yttrium sample gamma activity
- 10.00 Zhuk Ihar (Belarus) Spatial distribution of natural U fission rate in QUINTA subcritical assembly irradiated by 1, 4, 6 and 8 GeV deuteron's beams

10.20 Paraipan Mihaela (JINR)

Investigation of the possibility to use ion beams for ADS through simulation in **GEANT4**

10.40 Zavorka Lukas (JINR)

A summary of experimental results on the reactions in uranium samples irradiated with a deuteron beam of enrgies up to 8 GeV at the QUINTA target

Coffee break 11.00 – 11.30

Chairman Furman W.

- 11.30 Husak Kristsina (Belarus) Deuterons beam parameters measurements of the NUCLOTRON
- 11.50 Wagner Vladimir (Czech Republic) Studies of deuteron and neutron cross-sections important for ads

12.10 Suchopár Martin (Czech Republic)

Monte Carlo simulations of natural uranium setups irradiated with relativistic deuterons by means of MCNPX code

12.30 Bielewicz Marcin (Poland)

On results of Y-89 Irradiation with deuteron beam on QUINTA -assembly "E+T — RAW" using Nuclotron (JINR)

12.50 Szuta Marcin (Poland)

Analysis of potential advanced thorium based fuel for EPR reactor

13.10 Adam Jndra (JINR)

The investigations of reaction rates in Th interacted with neutrons in QUINTA subcritical assembly irradiated by 2, 4 and 6 GeV deuterons

13.30 Kudashkin Ivan (Russia)

The MCP-based system for monitoring space-time characteristics of circulating beam of Nuclotron

Break 13.50 - 15.00

September 12, Wednesday VBLHEP Conference Hall Parallel Session A

Dynamics of multiparticle production

Chairman Słowiński B.

- 15.00 Lykasov Gennady (JINR) Heavy flavour production in p-p collisions and intrinsic quark components in proton
 15.40 Feofilov Grigory (Russia) Forward-backward multiplicity correlations in pp collisions in ALICE at 0.9, 2.76 and 7 TeV
- 16.00 *Dmitriev Aleksandr (Russia)* Analysis of differences on pseudorapidity multiplicities spectrum at LHC and UA1/UA5 experiments
- 16.20 *Kovalenko Vladimir, Vechernin Vladimir (Russia)* Model of pp and AA collisions for the description of long-range correlations

Coffee break 16.40 – 17.10

Dynamics of multiparticle production, Accelerator facilities: status and perspectives

<u>Chairman</u> Feofilov G.

17.10	Amalsky Gennady (Russia)
	Possible origin of observed at incident proton energy 50 GeV events
	pp->pp+n pi with anomalous multiplicity
17.30	Słowiński Bronislaw (Poland)
	Longitudinal profiles, fluctuations and correlations of electromagnetic cascades
	produced by 100-3500 MeV gamma quanta in heavy amorphous media
17.50	Yudin Ivan (JINR)
	The field distribution into the spin-turning magnet for the Delta-Sigma
	experiment
18.10	Maevskaya Alla (Russia)
	Start and trigger detector T0 of the ALICE experiment
18.30	Patsyuk Maria (Germany)
	R&D for the PANDA Barrel DIRC
19.00	

September 12, Wednesday Auditorium 347 Parallel Session B

Applied use of relativistic beams

<u>Chairman</u> Wagner V.

- 15.00 *Martsynkevich Barys (Belarus)* Determination of fast neutron spectrum by a deformation of the reference spectrum expanded on Legendre polynomials in according to reaction rates in threshold detectors
- 15.20 Voronko Vladimir (Ukraine) Neutrons generation by relativistic deuterons in the uranium target of assembly "QUINTA-M"
- 15.40 *Westmeier Wolfram (Germany)* Suggested investigations concerning unresolved experimental observations
- 16.00 **Zhdanov Sergey (Kazakhstan)** A PYF2-based technique for measuring the effective energy of beam-generated neutrons provoked fission in the interior of thick uranium targets

16.20 *Polanski Aleksander, Musulmanbekov Genis (JINR)* Development of dynamic model for simulation of nuclear spallation

Coffee break 16.40 - 17.10

Polarization phenomena, spin physics

Chairman Piskunov N.

17.10 Lomov Vladimir (Russia)

Top quark as resonance: renormalization and spin effects

17.30 Ladygina Nadezhda (JINR)

Differential cross sections and analyzing powers in the dd->3He n reaction at intermediate energies

17.50 Ivanov Nikolay (Armenia)

Perturbative stability of the QCD predictions for the ratio $R = F_L/F_T$ and azimuthal asymmetry in heavy-quark leptoproduction

18.10 Chavleishvili Mikhail (JINR)

Puzzle of high energy pp-scattering. helicity conservation from perturbative QCD or kinematic hierarchy?

18.30 Gurchin Yury (JINR)

The differential cross-section on dp-elastic scattering at 880 MeV obtained at Nuclotron

18.50 Lyuboshitz Valery (JINR)

Pair correlations of internal quantum numbers and entangled two-particle states

19.10

September 13, Thursday VBLHEP Conference Hall Parallel Session A

Structure functions of hadrons and nuclei

Chairman Lukyanov V.

9.00	Shebeko Aleksandr (Ukraine)
	A new approach to the theory of electromagnetic interactions with bound
	systems: calculations of deuteron magnetic and quadrupole moments
9.20	Destefanis Marco (Italy)
	Measuring the phase between strong and EM J/psi decay amplitudes
10.00	Pavlov Fedor (Russia)
	Relativistic correction to the first moment of the spin-dependent structure
	function of the deuteron $Gamma^d_1(q^2)$ in the light-cone formalism
10.20	Malyshev Maxim (Russia)
	Prompt photon and associated heavy quark production in the kt-factorization
	approach
10.40	Skachkov Nikolai (JINR)
	Processes with photons at D0 experiment

Coffee break 11.00 – 11.30

Chairman Shebeko A.

- 11.30 *Kotikov Anatoly (JINR)* Small x behavior of parton densities
- 12.10 *Kudinov Maxim (Russia)* "Non-Rosenbluth" behavior of the proton form factors and the violation of the CP-symmetry
- 12.30 *Gabdrakhmanov Il'nur (Russia)* Subtractions in exclusive vector meson production
- 12.50 *Klopot Yaroslav (JINR)* Nonperturbative QCD and transition form factors

Break 13.30 – 15.00

September 13, Thursday Auditorium 347 Parallel Session B

Progress in experimental studies in the high energy centers, Relativistic heavy ion collisions

Chairman Kugler A.

- 9.00 *Fedorišin Ján (JINR)* Cathode pad chambers at NICA/MPD
- 9.20 *Ladygin Vladimir (JINR)* Study of strange matter production at Nuclotron (BM@N-project)
- 9.40 *Terekhin Arkadiy (JINR)* Preparation of experiments to study light nuclei structure at Nuclotron
- 10.00 *Abraamyan Khachik (JINR)* Observation of the E(38)-boson
- 10.20 *Kokoulina Elena (JINR)* The evidance for pion condensation formation in pp at U-70
- 10.40 *Kulikov Viacheslav (Russia)* High energy protons from C-12 fragmentation
- Coffee break 11.00 11.30

Relativistic heavy ion collisions

<u>Chairman</u> Ladygin V.

11.30	Kurilkin Pavel (JINR)
	New data on the differential cross section of dp- elastic scattering at 2.5 GeV
	obtained with HADES Detector
11.50	Kurilkin Aleksey (JINR)
	Double pion production in np and pp collisions at 1.25 GeV with HADES
12.10	Boyda Denis, Shirmovsky Sergey (Russia)
	Mathematical model of DNA lesions
12.30	Suleymanov Mais (Pakistan)
	Pseudorapidity spectra of secondary particles emitted in the relativistic nucleus-
	nucleus collisions
12.50	Sewailem Shaban (Egypt)
	Scattering of K(+) meson from Ca(40) nucleus
13.10	Khan Kamal, Suleymanov Mais (Pakistan)
	Observation of light nuclei formation nuclear coalescence in HeC and CC-
	interactions at 4.2 A GeV/c
Break	13.30 – 15.00
	Dubna Ducci

September 13, Thursday VBLHEP Conference Hall Parallel Session A

Quantum chromodynamics at large distances

<u>Chairman</u> Lyubovitsky V.

15.00 *Kataev Andrei (Russia)* Theoretical manifestaion of the conformal symmetry in the expressions for the polarized DIS sum rules

15.40 *Solovtsova Olga (Belarus)* On manifestation of quark-hadron duality via the Adler D-function

16.00 **Bugaev Kyrill (Ukraine)** Adiabatic chemical freeze-out and wide resonance modification in a thermal media

Coffee break 16.40 - 17.10

VBLHEP Conference Hall Plenary Session

Studies of exotic nuclei in relativistic beams

Chairman Strokovsky E.

- 17.10 Majlingova Olga (Czech Republic)
 Hyperfragments from light p-shell hypernuclei
 17.20 Behamakin Valuria (Bussie)
- 17.30 *Polyanskiy Valeriy (Russia)* Studies of eta-mesic nuclei at the LPI electron synchrotron
 17.50 *Artemenkov Denis (JINR)*

Radioactive nuclei stopped in nuclear track emulsion

18.10

19.30 Concert

September 13, Thursday Auditorium 347 Parallel Session B

Relativistic heavy ion collisions

<u>Chairman</u> Baatar Ts.

- 15.00 **Yukalov Vyacheslav (JINR)** Models of mixed quark-hadron matter
- 15.40 *Titov Arsenii (Russia)* Net charge fluctuations in AA collisions in a simple string-inspired model
- 16.00 *Prikhod'ko Nikolay (Russia)* Homogeneous Balitsky-Kovchegov hierarchy and Reggeon field theory
- 16.20 *Topilskaya Natalia (Russia)* Charmonium production in heavy ion collisions

Coffee break 16.40 – 17.10

September 14, Friday VBLHEP Conference Hall Plenary Session

Relativistic heavy ion collisions

Chairman Shimanskiy S.

9.00 *Hanna Kamal (Egypt)* Microscopic pion-nucleon and nucleus scattering at intermediate energies
9.20 *Filip Peter (Slovakia)*

Influence of ground-state vibration and deformation of nuclei on the Elliptic flow

- 9.40 *Ajaz Muhammad, Suleymanov Mais (Pakistan)* Nuclear transparency effect in proton and deuteron carbon interaction with carbon nuclei
- 10.00 *Parvan Alexandru (JINR)* The nuclear first order phase transition at intermediate energies

10.20 *Rogochaya Elena (JINR)* Kaon femtoscopy correlations in Pb-Pb collisions at sqrt(s_NN)=2.76 TeV from the ALICE experiment at LHC

Coffee break 10.40-11.10

Cumulative and subthreshold processes

<u>Chairman</u> Stavinskiy A.

- 11.10 Shimanskiy Stepan (JINR) Experimental study of cold dense baryon matter in high p_T processes
 11.50 Mikhailov Konstantin (Russia) Double cumulative photon specta at mid rapidity and high pt in C+Be collisions at 2.0 and 3.2 AGeV
 12.10 Keeturke Barie (UND)
 - 12.10 *Kostenko Boris (JINR)* Possible development of cumulative particle experiments with NICA facility

12.50 *Kiselev Yury (Russia)* Probing of the transverse momentum dependent parton distributions in cumulative reactions

Break 13.10 – 15.00

September 14, Friday VBLHEP Conference Hall Plenary Session

Quantum chromodynamics at large distances

<u>Chairman</u> Ivanov M.

- 15.00 *Gerasimov Sergo (JINR)* On possible role of non Q bar-Q admixtures in light (pseudo)scalar mesons
- 15.20 *Efimov Gariy (JINR)* Stationary Schroedinger equation and functional integral
 15.40 *Lyubovitsky Valery (Cormany)*
- 15.40 *Lyubovitsky Valery (Germany)* Baryon structure in AdS/QCD

16.00 Lukyanov Valery (JINR)

Pion-nucleus microscopic optical potential at intermediate energies and inmedium effect on the elementary pi-N scattering amplitude

16.20 **Baatar Tseepeldorj (Mongolia)** Study of the phase transition in π^- C interactions at 40 GeV/c

Coffee break 16.40 – 17.00

<u>Chairman</u> Efimov G.

- 17.00 *Krasavin Evgeny (JINR)* Accelerated heavy ions as a tool for solving problems in fundamental and space radiobiology
- 17.30 *Pervushin Victor (JINR)* Condesate conformal simmetry breaking
- 18.10 Bogolubsky Igor (JINR)On the continuum limit of Landau gauge gluon and ghost propagators in SU(2) lattice gauge gluodynamics
- 18.30 *Goy Vladimir, Molochkov Alexander (Russia)* Witten parameter in the SU(2)-gluedynamics
- 18.50 **Bondarenko Serge (JINR)** About the Proceedings

18.55

19.00 Banquet

September 15, Saturday VBLHEP Conference Hall Plenary Session

Progress in experimental studies in the high energy centers

Chairman Zarubin P.

- 9.00 *Ivanov Sergey (Russia)* Light Ions in Accelerator Complex U70 of IHEP
- 9.40 *Nedorezov Vladimir (Russia)* QED Non-linear effects in photonuclear processes
- 10.00 *Leckey John (USA)* The Hall D physics program at JLab
- 10.40 *Drutskoy Alexey (Russia)* The SuperB project

Coffee break 11.00-11.30

Chairman Ivanov S.

at

11.30	Malakhov Alexander (JINR)
	Asymptotic Properties of the Nuclear Matter
11.50	Kiselev Sergey (Russia)
	Resonance results with the ALICE experiment in pp and Pb-Pb collisions
	LHC energies
12.10	Nesterenko Valentin (JINR)
	Nanosystems: physics, applications, perspectives
12.50	Itkis Mikhail (JINR)
	Study of superheavy nuclei at JINR
13.30	Kekelidze Vladimir (JINR)
	Status and physics at NICA

- 14.00 Burov Valery (JINR), Malakhov Alexander (JINR) Closing
- 14.10 Na pososhok