

Session Program

15–20 Sept 2025



XXVIth International Baldin Seminar on High Energy Physics Problems "Relativistic Nuclear Physics and Quantum Chromodynamics"

Relativistic heavy ion collisions

VBLHEP JINR

Monday 15 September

14:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/347 - комната семинаров | Convener: Mamaev, Mikhail

14:00–14:20 **Collective behavior of hyperons in Pb-Pb collisions with ALICE**

Speaker

Dr Borissov, Alexander

14:20–14:40

Production of $\overline{\Sigma}^{\pm}$ baryons in p-Pb and pp collisions at the LHC with ALICE

Speaker

Gordeev, Pavel

14:40–15:00

Vector mesons photoproduction in ultra-peripheral ion-ion collisions

Speaker

Gevorgyan, Sergey

15:00–15:20

MPD-ITS Current status

Speaker

Tsapulina, Ekaterina

15:20–15:40

Two-particle rapidity correlations in strongly intensive quantities within string model

Speaker

Andronov, Evgeny

15:40

16:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/347 - комната семинаров | Convener: Riabov, Viktor

16:00–16:20

Directed flow of protons in Xe+CsI collisions at the beam energy of 3.8A GeV with BM@N

Speaker

Mamaev, Mikhail

16:20–16:40

Impact of in-medium on proton scattering amplitude at incident energies 12.7-1000 MeV

Speaker

Abdulmagead, Ibrahim

16:40–17:00

Pion Spectra and Entropy per Rapidity in Au–Au Collisions at NICA Energies Using HRG with Resonance Decays and Tsallis Distribution

Speaker

Dr Nasar, Mahmoud

17:00–17:30

Performance for inclusive photon and neutral pion spectra and anisotropic flow measurements with the MPD experiment

Speaker

Golosov, Oleg

17:30–17:50

Hadronic resonance production with ALICE at the LHC

Speaker
Kiselev, Sergey

17:50–18:10 **Anisotropic flow in asymmetric Xe+W collisions at MPD-FXT**

Speaker
Parfenov, Peter

18:10

Tuesday 16 September

16:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/Conference Hall - Конференц-зал корп. 215 | Convener: Dr Zherebchevsky, Vladimir

16:00–16:20 **Study of the Higgs boson using various machine learning algorithms**

Speaker

Ahmadov, Faig

16:20–16:40 **Latest results of searches for invisible Higgs Boson decays in the ATLAS experiment**

Speaker

Pokidova, Marina

16:40–17:00 **Two particles correlations in HIC**

Speaker

Rogachevsky, Oleg

17:00–17:20

High-order net-proton cumulants and the event volume definition in A+A collisions at NICA energies.

Speaker

Feofilov, Grigory

17:20–17:40 **Neutral pion elliptic flow in p+Au collisions at 200 GeV**

Speaker

Ms Komarova, Snezhana

17:40–18:00 **Simulation of Heavy-Ion Collisions for the SPD BBC Phase 0 Detector**

Speaker

Volkov, Ivan

18:00

Thursday 18 September

14:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/Conference Hall - Конференц-зал корп. 215 | Convener: Bikmetov, Nikita

14:00–14:20

NONPERTURBATIVE KINETIC DESCRIPTION OF THE VACUUM QGP PRODUCTION IN THE ABELIAN PROJECTION METHODS

Speaker

Dmitriev, Vadim

14:20–14:40

Holographic equation of state matched with hadron gas EoS as a tool for the study of the QGP evolution

Speaker

Anufriev, Anton

14:40–15:00

Exploring α -Particle Emission Induced by Relativistic Muons in Nuclear Emulsion

Speaker

Dr NATARAJAN, MARIMUTHU

15:00–15:20

Predictions in modified Glauber model of total charged-particle yields in $16\text{O} + 16\text{O}$ and $20\text{Ne} + 20\text{Ne}$ collisions at LHC

Speaker

Simak, Svetlana

15:20–15:40

Centrality determination in heavy-ion collisions at the NICA energy range.

Speaker

Demanov, Alexander

15:40

16:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/Conference Hall - Конференц-зал корп. 215 | Convener: Dmitriev, Vadim

16:00–16:20

Baryon femtoscopy in 3.2 AGeV argon-nucleus interactions

Speaker

Mr Alekseev, Petr

16:20–16:40

Search for anomalous leptons with masses in the range of 8-20 MeV at the Nuclotron (experiment proposal)

Speaker

Shindin, Roman

16:40–17:00

Measurements of Charged Fragments Spectators Yields in Xe+CsI reaction at 3.8 AGeV at BM@N

Speaker

Volkov, Vadim

17:00–17:20

MANIFESTATION OF ANISOTROPIC HYDRODYNAMICS BASED ON THE LATEST DATA ON PION AND KAON EMISSION IN HEAVY-ION COLLISIONS IN THE BM@N EXPERIMENT

Speakers

Prof. D'yachenko, Alexander, D'yachenko, Alexander

17:20–17:40

Strange hadron production in Au+Au collisions at $\sqrt{s_{NN}}=3\text{--}27$ GeV with UrQMD**Speaker**

Timofeev, Artem

17:40

Friday 19 September

09:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/347 - комната семинаров | Convener: Prof. Melezhik, Vladimir

09:00–09:30

Transverse Momentum Spectra of Hadrons in the Blast-Wave Model with Local Equilibrium and Tsallis Statistics with Global Equilibrium

Speaker

Dr Parvan, Alexandru

09:30–09:50

Collective flow of lambda hyperons in the MPD experiment at NICA energies

Speaker

Troshin, Valery

09:50–10:10

Parton energy loss in Cu+Au and U+U collisions at $\sqrt{s_{NN}}=200$ and 193 GeV, respectively

Speaker

Mr Borisov, Ivan

10:10–10:30

Directed, elliptic and triangular flow of charged hadrons in O + O, Kr + Kr and Xe + Xe collisions at $\sqrt{s_{NN}} = 6$ GeV in UrQMD model for SPD experiment

Speaker

Povarov, Alexey

10:30

14:00

Relativistic heavy ion collisions

Session | Location: VBLHEP, LHEP-215/Conference Hall - Конференц-зал корп. 215 | Convener: Dr Kireyeu, Viktor

14:00–14:20

Forward neutrons from 12C-12C and 40Ca-40Ca collisions in the SPD experiment as a probe of nucleon-nucleon correlations.

Speaker

Svetlichnyi, Aleksandr

14:20–14:40

Target dependence of fragmentation reaction cross-sections at intermediate energies and its calculation in the relativistic and low-energies oriented models.

Speaker

Mikhailova, Tatjana

14:40–15:00

Addressing heavy ion collision parameters estimation challenges via neural network techniques

Speaker

Galaktionov, Kirill

15:00–15:20

Collective flow harmonics correlations analysis for model data at Nuclotron-NICA energies

Speaker

Bikmetov, Niktia

15:20–15:40

Multiplicity dependent transverse momentum distributions of hadrons of different species in the extended multipomeron exchange model**Speaker**

Kovalenko, Vladimir

15:40

16:00

Relativistic heavy ion collisions**Session** | **Location:** VBLHEP, LHEP-215/Conference Hall - Конференц-зал корп. 215 | **Convener:** Kovalenko, Vladimir

16:00–16:30

Analysis of light hadron spectra obtained with MPDRoot for Bi+Bi collisions at $\sqrt{s_{NN}} = 9.2$ GeV**Speaker**

Kolomoiets, Natalia

16:30–16:50

Ratios of the average transverse energy density for ϕ , K^+ , K^- and K^* mesons in the range $\sqrt{s_{NN}} = 39$ GeV - 2.76 TeV and hypothesis of a common production source**Speaker**

Shaposhnikova, Olga

16:50–17:10

Identifying the mechanism of light nuclei production**Speaker**

Dr Kireyeu, Viktor

17:10–17:30

RECOVERING COLLISION ENERGY CHARACTERISTICS FROM GEOMETRICALLY CONSTRAINED DATA BY MACHINE LEARNING**Speaker**

Gridiaeva, Polina

17:30–18:00

First Measurements of Φ Meson Production in pp Collisions at $\sqrt{s_{NN}} = 510$ GeV.**Speaker**

Dr Shahaliyev, Ehtiram

18:00