

## Session Program

20–23 Oct 2020



### The Conference "RFBR Grants for NICA"

***Theoretical studies of the dense baryonic matter produced in heavy-ion collisions at NICA***

VBLHEP, JINR, Dubna, RUSSIA, Conference hall

## Tuesday 20 October

16:30

### Theoretical studies of the dense baryonic matter produced in heavy-ion collisions at NICA

Session | Location: [https://meet3.interprocom.ru/RFBR\\_NICA](https://meet3.interprocom.ru/RFBR_NICA) | Convener: Oleg Teryaev

16:30–16:55

#### Polarization of elementary particles in heavy ion collisions as a manifestation of anomalies in quantum field theory

Speaker

Valentin Zakharov

16:55–17:20

#### Lattice study of the properties of QCD in extreme conditions: temperature and density, rotation, magnetic field.

Speaker

Victor Braguta

17:20–17:45

#### Nonequilibrium properties of quark-gluon matter at energies of the NICA collider

Speaker

Igor Dremin

17:45–18:10

#### Investigation of parity nonconservation processes in the scattering of longitudinally polarized protons by a deuteron

Speaker

Nikolai Nikolaev

18:10

## Wednesday 21 October

14:00

### Theoretical studies of the dense baryonic matter produced in heavy-ion collisions at NICA

Session | Location: [https://meet3.interprocom.ru/RFBR\\_NICA](https://meet3.interprocom.ru/RFBR_NICA) | Convener: Oleg Teryaev

14:00–14:25

**Study of the signals of hot and dense nuclear matter in heavy ion collisions at the energies of the NICA complex using micro- and macroscopic models**

**Speaker**

Evgeny Zabrodin

14:25–14:50

**Investigation of dense baryonic matter by lattice quantum chromodynamics methods**

**Speaker**

Vitaly Bornyakov

14:50–15:15

**Investigation of the properties of nuclear matter under conditions of extreme temperatures and densities attainable at the energies of the NICA accelerator complex**

**Speaker**

Yuri Kalinovsky

15:15–15:40

**Study of the phase diagram of dense quark-gluon plasma from the first principles of the theory, enhanced by machine learning methods**

**Speaker**

Alexander Molochkov

15:40–16:05

**Theoretical studies of the formation and properties of quark-gluon matter under conditions of high baryon densities attainable at the NICA experimental complex**

**Speaker**

Irina Arefieva

16:05

## Friday 23 October

14:20

### Theoretical studies of the dense baryonic matter produced in heavy-ion collisions at NICA: Parallel session V

Session | Location: [https://meet3.interprocom.ru/RFBR\\_NICA](https://meet3.interprocom.ru/RFBR_NICA) | Convener: Oleg Teryaev

14:20–14:40

#### Quantum-field effects of acceleration and vorticity in QCD: polarization, geometry and statistics

##### Speaker

George Prokhorov

##### Location

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14:40–15:00

#### Holographic studies of a heavy quark motion in rotating quark-gluon plasma

##### Speaker

Anastasia Golubtsova

##### Location

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15:00–15:20

#### Quantum fields in Keldysh-Schwinger diagram technique and semiclassical expansion

##### Speaker

Anna Radovskaya

##### Location

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15:20–15:40

#### Spin polarization in relativistic heavy-ion collisions (at NICA)

##### Speaker

Yuri B. Ivanov

##### Location

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15:40–16:00

#### Coffee

16:00–16:20

#### Lattice study of the confinement/deconfinement phase transition in SU(3)-gluodynamics in rotating frames

##### Speaker

Artem Roenko

##### Location

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16:20–16:40

#### Phase diagram structure and kaon-to-pion ratios in the entanglement SU(3) PNJL model in Breit-Wigner and Beth-Uhlenbeck approaches

##### Speaker

Alexandra Friesen

##### Location

16:40–17:00

#### Fluctuation phenomena in the precritical region

**Speaker**

Boris Kerbikov

**Location**[https://meet3.interprocom.ru/RFBR\\_NICA](https://meet3.interprocom.ru/RFBR_NICA)

17:00–17:20

**Holographic model for anisotropic QGP with external magnetic field****Speaker**

Kristina Rannu

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17:20–17:40

**Holographic Anisotropic Model with Confinement-Deconfinement Phase Transition for Light and Heavy Quarks****Speaker**

Pavel Slepov

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17:40–18:00

**Stability of shock waves in anisotropic hydrodynamics****Speaker**

Aleksandr Kovalenko

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18:00