



# The XXVI International Scientific Conference of Young Scientists and Specialists (AYSS-2022)

## Tuesday, 25 October 2022

### Theoretical Physics - Conference hall (14:00 - 16:00)

| time  | [id] title   | presenter             |
|-------|--|-----------------------|
| 14:00 | [1018] Photons production in heavy ion collisions as a signal of deconfinement phase           | NIKOLSKII, Aleksei    |
| 14:15 | [983] SU(3) Dual QCD Thermodynamics at Finite Temperature and Chemical Potential               | Prof. PUNETHA, Garima |
| 14:30 | [1120] Thermal phase transition in rotating QCD with $N_f = 2$ clover-improved Wilson fermions | Dr ROENKO, Artem      |
| 14:45 | [1163] Influence of relativistic rotation on the equation of state of gluodynamics             | SYCHEV, Dmitrii       |
| 15:00 | [1009] On explicit cutoff regularization   | Dr IVANOV, Aleksandr  |
| 15:15 | [1080] pp scattering at the LHC with the lepton pair production and one proton tagging         | KARKARYAN, Evgeny     |
| 15:45 | [1073] Worksheet of a continuous helicity particle   | RETUNTSEV, Ivan       |

### Theoretical Physics - Conference hall (16:20 - 17:35)

| time  | [id] title  | presenter         |
|-------|---|-------------------|
| 16:20 | [1086] Impact of non-universal $Z'$ to the $B \rightarrow K \nu \bar{\nu}$ decays               | MUKHAEVA, Alfiia  |
| 16:35 | [1118] Frobenius solution for non-polylogarithmic Feynman integrals and hypergeometry expansion | BEZUGLOV, Maxim   |
| 16:50 | [1119] Theoretical analysis of rare decay $B^+ \rightarrow \pi^+ \tau^+ \tau^-$                 | PARNOVA, Irina    |
| 17:05 | [1021] Parton distribution functions of positron in electron in QED                             | VOZNAYA, Uliana   |
| 17:20 | [1054] Directly computing reduced density matrices with influence functionals                   | KÄDING, Christian |

## Wednesday, 26 October 2022

### Theoretical Physics - R2 (310) (14:00 - 16:00)

| time  | [id] title   | presenter          |
|-------|--|--------------------|
| 14:00 | [1007] Evolution of the phenomenologically determined collective potential along the chain of Zr isotopes                                      | MARDYBAN, Evgenii  |
| 14:15 | [1071] Individual dipole toroidal states in $^{58}\text{Ni}$   | VISHNEVSKIY, Petr  |
| 14:30 | [1150] Behavior of moment of inertia in highly deformed $^{24}\text{Mg}$ and $^{20}\text{Ne}$  | MARDYBAN, Mariia   |
| 14:45 | [1066] Resonance phenomena in nanomagnet + Josephson junction system under external periodic drive   | KULIKOV, Kirill    |
| 15:00 | [1069] Manifestation of Devil's staircase and Negative Differential Resistance in the IV- Characteristics of $\varphi_0$ Josephson Junction    | Dr NASHAAT, M.     |
| 15:15 | [1100] Ultracold rotating molecules inside the Rydberg atom  | ADAMYAN, Grigor    |
| 15:30 | [976] Energy-dependent flavor ratios, cascade/track spectrum tension and high-energy neutrinos from magnetospheres of supermassive black holes | RIABTSEV, Kirill   |
| 15:45 | [977] Skyrme-like $\Lambda$ hyperonic interactions and neutron stars properties  | Mr MIKHEEV, Semyon |

### Theoretical Physics - R2 (310) (16:20 - 17:35)

| time  | [id] title   | presenter         |
|-------|--|-------------------|
| 16:20 | [1149] Molecular orientation by two-color laser fields   | Dr KOVAL, Eugene  |
| 16:35 | [1082] E-models of inflation towards describing formation of primordial black holes                              | FROLOVSKY, Daniel |
| 16:50 | [1078] On 4 Dimensional Exceptional Drinfel'd Algebras   | KUMAR, Sameer     |
| 17:05 | [1000] Flows of geometric parameters of Sasaki-Einstein manifolds $Y_{p,q}$ and $L_{p,q,r}$ through isomonodromy | AVRAMOV, Vasil    |
| 17:20 | [1032] THE DEUTERON CHARGE RADIUS $R_C$ IN THE FRAMEWORK OF THE HARD-WALL ADS/QCD MODEL                          | HUSEYNOVA, Narmin |