## The 5th international conference on particle physics and astrophysics



Contribution ID : 672

Type : Oral talk

## Study of the resonances in heavy-ion collisions at NICA energies using the MPD detector

Thursday, 8 October 2020 18:20 (15)

The short-lived resonances produced in heavy-ion collisions probe the existence and the properties of the late hadronic phase of the nucleus-nucleus interactions. Due to their short lifetimes, the resonance differential yields in the final state are sensitive to competing processes of rescattering of daughter particles and regeneration of surrounding hadrons in the dense hadron gas. The resonances also carry information about strangeness production and hadronization mechanisms. We report the expected properties of the resonances produced in heavy-ion collisions at NICA energies as well as the results of feasibility studies for reconstruction of resonances in the MPD experiment. This work was funded by RFBR according to the research project # 18-02-40038 and partially supported by the National Research Nuclear University MEPhI in the framework of the Russian Academic Excellence Project (contract No.02.a03.21.0005, 27.08.2013).

Primary author(s): Dr. RIABOV, Victor

**Co-author(s) :** Dr. MALAEV, Mikhail (NRC «Kurchatov Institute» - PNPI); IVANISHCHEV, Dmitry (NRC «Kurchatov Institute» - PNPI); Dr. KOTOV, Dmitry (NRC «Kurchatov Institute» - PNPI); Dr. RYABOV, Yuriy (NRC «Kurchatov Institute» - PNPI)

**Presenter(s):** Dr. RIABOV, Victor

Session Classification : Heavy Ion Physics

Track Classification : Heavy Ion physics