Contribution ID: **321** Type: **Plenary talk (30 min + 10 min questions)**

Studies of dense baryonic matter with the BM@N experiment at the Nuclotron

Saturday, 16 July 2022 10:35 (35 minutes)

In the near future, the BM@N experiment at the Nuclotron at JINR in Dubna will start a physics program with heavy ions including Au-beams at energies up to 3.8 A GeV and intensities up to 2·10ˆ6 ions/s. The experiment is devoted to measure observables sensitive to the equation of state of dense baryonic matter, and to search for indications of a phase transition at high densities. To meet these goals, the existing BM@N set-up will be upgraded with fast hybrid tracking system, which includes beam tracking detectors, a large aperture silicon tracking system, GEM stations and cathode strip chambers. The measurement of the event plane and centrality will be achieved with a forward hadron calorimeter and granular hodoscopes. The physics program, the configuration of the upgraded BM@N set-up, results of physics performances studies will be presented.

The speaker is a student or young scientist

No

Section

1. Intermediate and high energies, heavy ion collisions

Primary author: MERTS, Sergei (JINR)

Presenter: MERTS, Sergei (JINR)

Session Classification: Plenary session