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Type: **Talk**

The upgrade program of the BM@N experiment at NICA

Thursday 1 October 2020 14:35 (30 minutes)

The Nuclotron at the Joint Institute for Nuclear Research in Dubna will deliver gold beams with kinetic energies between 2 and 3.8 A GeV. In heavy-ion collisions at these energies, it is expected that the nuclear fireball will be compressed up to about four times the saturation density, which offers the opportunity to study properties of nuclear matter at neutron star core densities. The Baryonic Matter at the Nuclotron (BM@N) experiment will be upgraded to perform multi-differential measurements of hadrons including (multi-) strange hyperons, which are expected to be sensitive to the high-density equation-of-state (EOS) of nuclear matter, and might reflect new phases of quantum chromodynamic (QCD) matter. Moreover, the measurement of light hypernuclei may shed light on the role of hyperons in neutron stars. The layout of the upgraded BM@N experiment and the results of feasibility studies will be presented.

Is this abstract from experiment?

Yes

Internet talk

Yes

Name of experiment and experimental site

Is the speaker for that presentation defined?

Yes

Details

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Session Classification: Plenary

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