

XXV International Baldin Seminar on High Energy Physics Problems
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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on High Energy Physics Problems
Relativistic Nuclear Physics & Quantum Chromodynamics

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Directed and elliptic flow of protons in the heavy ion collisions at 2-4 GeV

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In the relativistic heavy ion collisions at the beam energy of a few GeV the strongly interacting matter is created at high baryon densities and relatively low temperatures. Azimuthal anisotropy of the produced particles provides a valuable insight into the properties of this form of matter. In this work, we discuss the layout of the upgraded Baryonic Matter at Nuclotron (BM@N) experiment and the anticipated performance for the measurements of the directed and elliptic flow of protons with respect to spectator symmetry plane. We also present the results of the study of scaling properties of anisotropic flow of protons at the beam energies of a several GeV.

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