

## Flow performance in MPD at NICA

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The Nuclotron-based Ion Collider fAcility (NICA) in Dubna, Russia is currently under construction at the Joint Institute for Nuclear Research (JINR). A Multi Purpose Detector (MPD) at NICA is designed to study properties of baryonic dense matter in the range of center of mass collision energy from 4 to 11 GeV. We present a performance study for anisotropic transverse flow measurement in Au+Au collisions using the UrQMD event generator and Geant4 simulation of the MPD response. The collision symmetry plane is estimated from event-by-event transverse energy distribution in Forward Hadron Calorimeters (FHCals). Performance of the MPD for a measurement of the directed ( $v_1$ ) and elliptic ( $v_2$ ) flow of identified charged hadrons is evaluated based on comparison between reconstructed  $v_1$  and  $v_2$  values and the input one from the UrQMD model.

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