

Performance of the MPD experiment for the azimuthal flow measurement

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The main goal of the future MPD experiment at NICA is to explore the QCD phase diagram in the region of highly compressed and hot baryonic matter in the energy range corresponding to the highest chemical potential. Properties of such dense matter can be studied using azimuthal anisotropy that are categorized by the Fourier coefficients of the azimuthal distribution decomposition. Performance of the detector response given from the simulated data via realistic reconstruction procedure will be discussed in this talk. Namely, centrality determination, reaction plane estimation, directed and elliptic flow coefficients will be shown.

Primary author(s) : Mr. SVINTSOV, Ilya (NRNU MEPhI); Mr. PARFENOV, Peter (NRNU MEPhI)

Co-author(s) : Mr. TARANENKO, Arkadiy (NRNU MEPhI); Mr. SELYUZHENKOV, Ilya (NRNU MEPhI, GSI)

Presenter(s) : Mr. PARFENOV, Peter (NRNU MEPhI)

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