

The effect of different centrality determination on the elliptic flow measurements

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One of the methods for studying the transport properties of QCD matter at extreme temperatures and energy densities is the study of anisotropic flow. The precise definition of centrality is an important task since directed and elliptic flow coefficients are dependent on centrality. Two methods of centrality determination were considered to study the effect of different centrality determination on the elliptic flow measurements. The first method is based on the Glauber model, and the second is based on inverse Bayes' theorem together with the geometric properties of the collision. Comparison of elliptic flow with centrality determination methods based on both charged particle multiplicity in TPC and the energy deposited in the forward calorimeters FHCAL will be presented.

Primary authors: IDRISOV, Dim (MEPHI); PARFENOV, Petr (NRNU MEPhI (RU)); LUONG, Vinh (National Research Nuclear University MEPhI (RU)); TARANENKO, Arkadiy (NRNU MEPhI)

Presenter: IDRISOV, Dim (MEPHI)

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