

Centrality determination method in nuclear collisions by using hadron calorimeter

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Centrality determination is an important task because it allows estimating the collision system size in relativistic heavy-ion collisions. With the help of centrality, it is also possible to compare the results of upcoming measurements with the Multi-Purpose Detector (MPD) at NICA with data from other experiments and calculations of theoretical models. In this work is proposed a new approach for centrality determination with energy of spectators. Centrality determination procedure was tested on NA61/SHINE data for Pb+Pb collisions at $p_{\text{lab}} = 13A \text{ GeV}/c$.

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