

Charged particle production in Pb-Pb collisions in ALICE

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Global event observables are a fundamental tool to characterize the properties of the strongly interacting medium created in heavy-ion collisions at the LHC. The ALICE experiment measured charged particle multiplicity distributions in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV in a wide pseudo-rapidity range ($-5 < \eta < 5.5$) using different techniques. In heavy-ion interactions the centrality of the collision is estimated through a Glauber Monte Carlo fit to multiplicity distributions reconstructed in various detectors. The charged particle yields as a function of particle transverse momentum in Pb-Pb relative to pp collisions are measured to study in-medium energy loss. Charged particle pseudo-rapidity distributions and the nuclear modification factor R_{AA} will be presented for Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. The results will be compared to experimental results at lower energies and to theoretical predictions.

Presentation Type

talk

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