

Particle yield modification in jet-like regions using azimuthal di-hadron correlations in Pb-Pb collisions at 5.36 TeV with ALICE

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The study of the produced hot and dense matter formed in heavy-ion collisions at the LHC allows the characterization of the quark–gluon plasma (QGP), the deconfined state of quarks and gluons. The measurement of the ratio of yields of charged particles in central to peripheral heavy-ion collisions (I_{CP}) provides strong constraints on the quenching mechanism in the QGP. In this talk, the modification of the per-trigger yield of associated particles, I_{CP} , extracted from dihadron correlations in Run 3 Pb–Pb collisions at 5.36 TeV will be presented. Such measurements have the potential to show two distinct effects: suppression on the away side due to strong in-medium energy loss as well as enhancement on the near side due to the reappearance of the quenched energy. A detailed study on collision energy and system size dependence of I_{CP} will be shown by comparing the results from Pb–Pb collisions at 2.76 TeV at the LHC and Au–Au collisions at RHIC.

Alternate track

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Yes

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