

Measuring cold nuclear matter effects via di-jets in pPb collisions with ALICE

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We present a measurement of jet correlations in p-Pb collisions at $\sqrt{s}=5.02$ TeV.

The aim of the measurement is to test whether cold nuclear matter effects and shadowing are present in p-Pb collisions.

Jets are measured using the central detectors using the anti-kT jet algorithm.

In the analysis the underlying event is subtracted event-by-event.

Corrections for the remaining underlying event contribution and the finite detector resolution are applied on an inclusive basis.

A measurement of the dijet $k_{\{T}}$ as function of the transverse momentum of the jet, varying jet resolution parameter, and the event multiplicity will be presented. This observable is a measure of the acoplanarity of dijet production which is potentially modified.

In addition the correlation in pseudorapidity of jet pairs which is sensitive to nuclear shadowing will be discussed.

Keywords

jets, pPb, cold nuclear matter, ALICE, LHC, kt

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