Quark Matter 2014 - XXIV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



Contribution ID: 415 Type: Poster

Inclusive Jet Spectra in p-Pb Collisions at ALICE

Tuesday 20 May 2014 16:30 (2 hours)

Jet suppression has been observed in central heavy-ion collisions. This suppression is attributed to partonic energy loss in the Quark-Gluon Plasma (QGP) formed in such collisions. However, this measurement is influenced by all stages of the collision. It is expected that in p-Pb collisions the same initial conditions occur as in Pb-Pb collisions without creating a QGP, allowing any cold nuclear matter effects to the jet spectra to be quantified. Inclusive jet spectra in p-Pb collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$ TeV measured by ALICE will be presented. Jets are reconstructed via the anti- k_{T} algorithm with different resolution parameters by combining charged tracks measured in the ALICE tracking system with the neutral energy deposited in the electromagnetic calorimeter. The spectra can be used to determine a nuclear modification factor R_{pPb} while the jet profile in p-Pb is studied by dividing spectra measured with different resolution parameters and comparing to the same ratio measured in pp collisions. The multiplicity dependence of the spectra in p-Pb collisions is also explored.

On behalf of collaboration:

ALICE

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Session Classification: Poster session

Track Classification: Jets