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



Contribution ID: 460 Type: Poster

Jet shapes and fragmentation functions in pp and PbPb collisions with CMS

Tuesday, 20 May 2014 16:30 (2 hours)

The fragmentation function and transverse momentum profile (shape) of inclusive jets in 2.76 TeV PbPb collisions are reported in this poster. Jets with transverse momentum $p_T > 100$ GeV/c are measured using anti- k_T algorithm with radius dR=0.3. Charged particles with $p_T > 1$ GeV/c are used to investigate the fragmentation pattern. The pp collisions at the same center-of-mass energy is analyzed to be used as a reference for the observation of medium effects in PbPb collision. A centrality-dependent modification of the fragmentation function and jet shape is found. A significant enhancement of charged particles of $p_T < 3$ GeV/c and their rearrangement toward periphery of jet cone are observed from the PbPb/pp ratio for the most central collisions.

On behalf of collaboration:

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Session Classification: Poster session

Track Classification: Jets