The 5th Asian Triangle Heavy Ion Conference (ATHIC2014)



Contribution ID: 56

Type: parallel

## pi^{0} production in p-Pb collisions at sqrt{s\_{NN}}=5.02 TeV with ALICE PHOton Spectrometer at the LHC

Wednesday 6 August 2014 16:40 (20 minutes)

The measurement of the neutral pion production in p-Pb collisions provides the information about the nuclear modified parton distribution function and allows to disentangle initial-state effects and final-state effects for Pb-Pb collisions. Meanwhile, it is also important to understand the decay photon background in measuring the direct photon production.

The ALICE experiment at the LHC performs measurements of the neutral pion spectrum and the nuclear modification factor  $R_{pPb}$  in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV with different methods, using two electromagnetic calorimeters via two-photon decays, as well as the central tracking system to reconstruct photons via conversion in the materials of the inner ALICE detectors and to reconstruct the  $\pi^0$  Dalitz decay. In this contribution, we will focus on the measurements by ALICE PHOton Spectrometer. Comparison of the  $\pi^0$  spectra from all ALICE subsystems will also be shown.

Primary author: ZHU, Hongsheng (Central China Normal University CCNU (CN))Presenter: ZHU, Hongsheng (Central China Normal University CCNU (CN))Session Classification: Hadron production