Contribution ID: **15** Type: **not specified**

Measurements of semi-inclusive recoil jet production and modification in pp and PbPb collisions at $\sqrt{s}$ = 5.02 TeV

Thursday, 19 December 2019 11:30 (20 minutes)

The measurement of reconstructed jets over a wide range in jet energy and jet resolution parameter is required for comprehensive understanding of jet quenching in heavy-ion collisions. Such measurements are challenging, however, due to the presence of complex, uncorrelated background to the jet signal, and the need to minimize biases in the selected jet population imposed by background suppression techniques.

In this contribution, we present an approach to measure jets using the semi-inclusive distribution of charged jets recoiling from a high-p_T charged hadron trigger in pp collisions at $\sqrt{s}$ = 5.02 TeV, with emphasis on the region of low recoil jet p_T by taking the advantages of the high statistics collected with ALICE. The semi-inclusive recoil jet measurement provides precise, data-driven suppression of the large uncorrelated background and uniquely enables the exploration of medium-induced modification of jet production over wide phase space, including low T for large jet resolution parameter . Such measurement provides a good test for pQCD calculations, and sets as a reference for jet quenching study in nucleus-nucleus collisions.

Publications

No

Presenter

Yuxing Dang

Master Student, PhD Student or Postdoc

Master Student

Primary author: 党, 煜星 (华中师范大学)

Presenter: DANG, Yu-Xing

Session Classification: Morning Session II