

ICHEP2012



Contribution ID: 210

Type: **Parallel Sessions**

Measurements of Jets and Jet Properties in $\sqrt{s_{NN}}=2.76$ TeV PbPb Collisions with the ATLAS Detector at the LHC

Friday 6 July 2012 09:15 (15 minutes)

Jet quenching in the hot and dense medium created in ultra-relativistic heavy ion collisions is a well-established experimental phenomenon at RHIC. It has long been anticipated that the LHC heavy ion program would substantially advance the study of jet quenching by providing access to highly energetic jets and by measuring fully-reconstructed jets. Immediately following turn-on of the LHC in November, 2010, that expectation was fulfilled through the observation of large di-jet asymmetries that may indicate substantial jet quenching. In this talk we will present recent results from ATLAS aimed to provide further understanding of this phenomenon. Measurements of single jet production, di-jet correlations and jet fragmentation in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV will be presented. In addition to measurements from the 2010 data, results using the full 2011 run will also be presented, benefiting from a factor of 20 improvement in statistics.

Primary author: Prof. ETZION, Erez (Tel Aviv University (IL) & CERN (CH))

Presenter: Prof. ETZION, Erez (Tel Aviv University (IL) & CERN (CH))

Session Classification: Room 217 - Heavy Ion Collisions / B-Physics / CP Violation - TR5/7/9

Track Classification: Track 9. Heavy Ion Collisions