



Contribution ID: 821

Type: **Parallel Talk**

Jet Measurements in Heavy Ion Collisions with the ATLAS Experiment

Saturday, 9 July 2022 16:10 (15 minutes)

Measurements of hard processes in heavy-ion collisions provide powerful and broad information on the dynamics of the hot, dense plasma formed in relativistic nucleus-nucleus collisions. This talk gives an overview of the latest jet measurements with the ATLAS detector at the LHC, utilizing the high statistics 5.02 TeV Pb+Pb data collected in 2015 and 2018. This talk presents multiple measurements of jet production and structure using novel analysis techniques. New results sensitive to the role of color-charge on jet quenching using EW boson-tagged jets will be also shown. Further, the single jet yields as a function of the azimuthal angle with respect to the 2nd, 3rd, and 4th event planes, and a new measurement of the dijet momentum balance will be discussed. A particular focus of the measurements is the systematic comparison of fully unfolded data to state-of-the-art theoretical models.

In-person participation

Yes

Presenter: COLE, Brian (Columbia University)**Session Classification:** Heavy Ions**Track Classification:** Heavy Ions