

Jet Measurements in Heavy Ion Collisions with the ATLAS Experiment

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Jets are an important tool to study the hot, dense matter produced in Pb+Pb collisions at the LHC. They are produced at the early stages of the collisions and are expected to be modified as they propagate through the hot and dense medium. This leads to energy loss as well as modification of the jet structure. This talk presents the latest jet measurements from Run 2 heavy-ion collisions data from ATLAS. The results shown in this talk include measurements of the angular distribution of charged particles around the jet axis, measurements of the flavor-dependence of energy loss via b-jets and jets associated with photons and Z bosons, and measurements of the jet internal structure characterized by the transverse momentum scale for the hardest splitting. Furthermore, the latest results on the dijet momentum balance in pp , Xe+Xe, and Pb+Pb collisions will be presented. The talk will also show a measurement of the single jet yields as a function of the azimuthal angle with respect to the event plane in Pb+Pb collisions. The data are compared to state of the art theoretical models and provide important information to understand the strength and mechanism of the jet quenching.

I read the instructions

Secondary track (number)

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