

# Jet Energy Scale and its Uncertainties Using the Heavy Ion Jet Reconstruction Algorithm in p+p Collisions at ATLAS

ATLAS uses a jet reconstruction algorithm in heavy ion collisions that takes as input calorimeter towers of size  $0.1 \times 0.1$  in  $\Delta\eta \times \Delta\phi$  and iteratively determines the underlying event background. This algorithm, which is different from the standard jet reconstruction used in ATLAS, is also used in the proton-proton collisions used as reference data for the Pb+Pb and p+Pb. This poster provides details of the heavy ion jet reconstruction algorithm and its performance in p+p collisions. The calibration procedure is described in detail and cross checks using photon-jet balance are shown. The uncertainties on the jet energy scale and the jet energy resolution are described.

## Preferred Track

Jets and High pT Hadrons

## Collaboration

ATLAS

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