Jet reconstruction and spectroscopy at hadron colliders



Contribution ID: 8

Type: not specified

Jet measurements in ATLAS

Monday 18 April 2011 11:10 (45 minutes)

The ATLAS experiment at the Large Hadron Collider (LHC) features a multi-purpose detector system with nearly complete coverage of the solid angle around the proton-proton or heavy ion collisions. It collected nearly 40/pb of proton data in 2010, and resumed data taking in early Spring 2011.

In this talk all aspects of jet physics, starting from jet reconstruction and calibration from the detector signals and the evaluation of the jet reconstruction performance with collision data, to the measurement of Standard Model (SM) physics and first access to exclusions of physics beyond the SM with jet final states, are presented. Among those are recently published results for the jet and di-jet cross-sections, the azimuthal correlation between jets in di-jet production, and results from other SM final state analysis involving jets. In addition, first results for new phase space limits for exclusions of new physics using jet final states are shown. Last but not least, the first results from jets in heavy ion collisions are briefly presented.

Presenter: LOCH, Peter (University of Arizona)

Session Classification: ATLAS & CMS Overview