LHCP 2013 - First Large Hadron Collider Physics Conference



Contribution ID: 154 Type: not specified

Jet and photon measurements from ATLAS

Differential measurements of inclusive and dijet production provide stringent tests of higher order QCD predictions and provide input for determination of parton density functions. Inclusive jet multiplicity ratios are sensitive to the strong coupling constant alpha_S and have reduced sensitivity to the uncertainties due to parton distribution functions. Measurements of the inclusive prompt isolated photon and diphoton cross sections provide a direct probe of short-distance physics, complementary to that from measurements of jets or vector-bosons, and are sensitive to the gluon density of the proton.

The results are compared to next-to-leading-order or higher-order QCD calculations.

Author: FERRARI, Pamela (NIKHEF (NL))

Presenter: FERRARI, Pamela (NIKHEF (NL))