



Contribution ID: 43

Type: **not specified**

## Probing perturbative QCD at the ATLAS Experiment

Perturbative QCD calculations at next-to-leading order are available for the jet production in pp collisions since several years and next-to-next-to leading order calculations also became available recently. In this talk, we present the latest results from the ATLAS collaboration for inclusive jets and dijets, measured at center of mass energies of 8 and 13 TeV. All measured cross-sections are compared to state-of-the art theory predictions. Moreover, we present two measurements of dijet correlations allowing to test the renormalization group equation and to extract the strong coupling constant.

**Author:** ATLAS, Speaker (ATLAS collaboration)

**Track Classification:** QCD and parton saturation physics