Contribution ID: **63** Type: **Contributed Talk**

Measurements of photon and jet production at ATLAS

Wednesday, 25 March 2020 16:52 (22 minutes)

The production of prompt isolated photons and jets at hadron colliders provides stringent tests of perturbative QCD and can be used to evaluate the probability density functions of partons in the proton. In this talk, we present the measurements of the isolated-photon plus two jets and the inclusive isolated-photons cross sections, both measured using proton-proton collision data collected by the ATLAS experiment at $\sqrt{s}$=13 TeV. The results are compared with state-of-the-art theory predictions, indicating several interesting discrepancies. If available, a measurement of event shape variables calculated using hadronic jets at $\sqrt{s}$=13 TeV will be presented. The measurement is compared to predictions by Monte Carlo event generators and results show discrepancies for some topologies.

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Session Classification: QCD with Heavy Flavors and Hadronic Final States

Track Classification: QCD with Heavy Flavors and Hadronic Final States