



Contribution ID: 38

Type: **Talk**

Measurements of photons and multijet events with ATLAS

Thursday 8 September 2022 16:10 (20 minutes)

The production of jets and photons at hadron colliders provide stringent tests of perturbative QCD. We present the latest measurements using proton-proton collision data collected by the ATLAS experiment at $\sqrt{s}=13$ TeV. We will discuss the measurement of new event-shape jet observables defined in terms of reference geometries with cylindrical and circular symmetries using the energy mover's distance. The results are unfolded for detector effects and compared to the state-of-the-art next-to-leading order parton shower generators. If ready, the measurement of strong coupling constant will be presented using the ratio of 3-jet to 2-jet events. Finally, prompt inclusive photon production is measured for two distinct photon isolation cones, $R=0.2$ and 0.4 , as well as for their ratio.

Internet talk

Yes

Details

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Online talk

Is this abstract from experiment?

Yes

Name of experiment and experimental site

ATLAS

Is the speaker for that presentation defined?

Yes

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Session Classification: High Energy Particle Physics