



Contribution ID: 110

Type: **Poster + flash-talk**

Multiplicity dependence of charged-particle jet production in pp collisions at 13 TeV with ALICE

Monday 1 August 2022 18:10 (10 minutes)

Measurements of jet production and jet properties in pp collisions provide a test of perturbative quantum chromodynamics (pQCD) and form a baseline for similar measurements in heavy ion (A–A) collisions. Recent studies of high-multiplicity final states of small collision systems exhibit signatures of collective effects that could be associated with hot and dense, color-deconfined QCD matter, which is known to be formed in collisions of heavier nuclei. The modification of the jet fragmentation pattern and jet properties is expected in the presence of such QCD matter. In this contribution, we report recent ALICE measurements of charged-particle jet production and intra-jet properties, including mean charged-constituent multiplicity and fragmentation distribution for leading jets, in minimum bias pp collisions at $\sqrt{s} = 13$ TeV. In addition, the event multiplicity dependence of jet production and jet properties in pp collisions at $\sqrt{s} = 13$ TeV will also be presented. Results will be compared with theoretical model predictions.

On behalf of collaboration?

ALICE

Attending in-person?

Yes

Subfield

HEP experiment

Preferred track

Jets & QCD at High Scales

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Session Classification: Poster Session