



Contribution ID: 81

Type: **Poster + flash-talk**

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

Tuesday 2 August 2022 12:35 (5 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.

Preferred track

Jets & QCD at High Scales

Subfield

HEP experiment

Attending in-person?

Yes

On behalf of collaboration?

ALICE

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Session Classification: Flash Talks

Track Classification: Jets and QCD at high scales