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## Multiplicity dependence of intra-jet properties in small collision systems with ALICE

*Tuesday 17 May 2022 19:00 (1 hour)*

Measurements of jet fragmentation 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. In addition, jet measurements in p-A collisions are sensitive to cold nuclear matter effects. 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. Measurements of jet fragmentation patterns and other jet properties in p-A collisions are needed in order to establish whether deconfined QCD matter is indeed generated in such small systems. In this contribution we report recent ALICE measurements of charged-particle jet properties, including mean charged-constituent multiplicity and fragmentation distribution for leading jets, in minimum bias p-Pb collisions at  $\sqrt{s} = 5.02$  TeV and minimum bias pp collisions at  $\sqrt{s} = 13$  TeV. In addition, the multiplicity dependence of these jet properties in pp collisions at  $\sqrt{s} = 13$  TeV will also be presented. Results will be compared with theoretical model predictions.

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