



Contribution ID: 176

Type: **bullet talk (poster)**

# Multiplicity dependence of charged jet properties in pp collisions at $\sqrt{s} = 13$ TeV with ALICE

*Wednesday 13 January 2021 19:45 (1h 30m)*

Jets are powerful tools for probing the properties of quark-gluon plasma (QGP) formed in high-energy nucleus-nucleus (AA) collisions. Recent results in high-multiplicity pp collisions suggest that QGP is also formed in such collisions since they show similar features to those that are associated with QGP production in AA collisions. Measurement of jet properties in pp collisions as a function of event multiplicity may elucidate the formation of a QGP in small colliding systems. In this presentation, we report the multiplicity dependence of charged jet observables (average charged particle multiplicity, radial transverse momentum density and fragmentation functions) for leading jets in the range of jet  $p_T$  from 5 - 120 GeV/c at midrapidity in pp collisions at  $\sqrt{s} = 13$  TeV with ALICE. Jets are reconstructed using anti- $k_T$  jet finding algorithm for jet resolution parameter  $R = 0.4$ .

**Author:** Ms BANERJEE, Debjani (Bose Institute (IN))

**Presenter:** Ms BANERJEE, Debjani (Bose Institute (IN))

**Session Classification:** Poster

**Track Classification:** The initial stages of heavy-ion collisions