



Contribution ID: 660

Type: Poster

Production of pions, kaons and protons as a function of charged particle multiplicity in pp collisions at $\sqrt{s} = 13$ TeV with ALICE at the LHC

Tuesday, 15 May 2018 19:10 (30 minutes)

Measurements of identified charged particle production as a function of multiplicity in pp and p-Pb collisions are important tools for understanding the similarities and differences between small and large interacting systems. The collective-like behavior observed in high multiplicity pp events is reminiscent of those observed in heavy-ion collisions. With its excellent tracking and particle identification capabilities, ALICE is an ideal instrument for the systematic study of pion, kaon and proton production from very low to high transverse momentum. In this report, the results of minimum bias as well as multiplicity-dependent transverse momentum spectra, p_T -integrated yield ratio and $\langle p_T \rangle$ of pions, kaons and protons in pp collisions at $\sqrt{s} = 13$ TeV will be presented. These results will be compared with the lower energy results of pp, p-Pb and Pb-Pb collisions as well as the predictions of various Monte-Carlo event generators and hydrodynamic models.

Content type

Experiment

Collaboration

ALICE

Centralised submission by Collaboration

Presenter name already specified

Primary author: SARMA, Pranjali (Gauhati University (IN))

Presenter: SARMA, Pranjali (Gauhati University (IN))

Session Classification: Poster Session

Track Classification: Collectivity in small systems