



Contribution ID: 377

Type: Poster

Production of pion, kaon, proton in high multiplicity pp collisions at 13 TeV at ALICE experiment

Tuesday 5 September 2023 17:30 (2h 10m)

Light-flavor hadrons constitute the bulk of the particles produced in high energy hadronic collisions at LHC. Recent studies show that in high multiplicity pp and p–Pb collisions at LHC energies, particle production exhibits features that mimic the behaviors observed in AA collisions (e.g., mass-dependent p_T hardening and strangeness enhancement). These features are a typical sign of the formation of a deconfined state of matter (the quark–gluon plasma). Measuring the light-flavor hadron transverse momentum spectra, integrated yields, and relative abundances in different collision systems provides crucial information on the collective evolution and hadronization process of the system.

This poster will present the new ALICE results on the pion, kaon, and proton production in high multiplicity event class in pp collisions at $\sqrt{s}=13$ TeV.

Category

Experiment

Collaboration (if applicable)

ALICE

Author: PATRA, Rajendra Nath (University of Jammu (IN))

Co-author: JACAZIO, Nicolo (Universita e INFN, Bologna (IT))

Presenter: PATRA, Rajendra Nath (University of Jammu (IN))

Session Classification: Poster Session

Track Classification: Light and strange flavor