



Contribution ID: 224

Type: Poster

Understanding the strange and multi-strange particle production mechanisms with ALICE at the LHC

The relative increase in the production of strange hadrons with respect to non-strange hadrons in heavy-ion collisions was historically considered one of the signatures of QGP formation. However, recent measurements in proton-proton (pp) and proton-lead (p-Pb) collisions have shown features that are reminiscent of those observed in lead-lead (Pb-Pb) collisions, i.e. an increase in the production of strange hadrons relative to pions with the charged particle multiplicity in the event.

Measurements of strange hadron production in different collision systems are presented. These results include transverse-momentum spectra, integrated yields, and baryon-to-meson ratios. These observables are studied as a function of charged-particle multiplicity in different collision systems and centre-of-mass energies. Recent measurements of strange hadrons as a function of multiplicity and effective energy in pp collisions and their production yields in and out of jets are also presented to further characterise the study of strangeness production.

Category

Experiment

Collaboration (if applicable)

ALICE

Author: SHARMA, Meenakshi (University of Jammu (IN))

Co-author: BHASIN, Anju (University of Jammu (IN))

Presenters: BHASIN, Anju (University of Jammu (IN)); SHARMA, Meenakshi (University of Jammu (IN))

Session Classification: Poster session 2

Track Classification: Light and strange flavor physics & nuclei