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Typ: Talk

Strangeness production in jets and underlying event in p-Pb and pp collisions measured with ALICE

Dienstag, 28. März 2023 17:30 (20 Minuten)

Two-particle jet-like angular correlations with identified strange hadrons allow the measurements of both jet and non-jet components of strange particle production, and in this way to investigate the extent to which the strangeness enhancement observed in small collision systems is a result of soft (medium-like) or hard (jet-like) processes. Relative contributions of these processes to strangeness production mechanisms can be probed by examining changes in the strange hadron over non-strange hadron ratios within jets and in the underlying event separately. In addition, changes to the jet hadrochemistry are studied by measuring strangeness production in the away-side jet.

In this talk, we present the first measurements of the ϕ/h , $(\Lambda + \bar{\Lambda})/h$ and $K_S^0/(\pi^+ + \pi^-)$, $(\Lambda + \bar{\Lambda})/(\pi^+ + \pi^-)$ ratios in jets and underlying event as a function of charged-particle multiplicity using jet-like di-hadron angular correlations in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV and pp collisions at $\sqrt{s} = 13$ TeV measured with ALICE. The results suggest that the strangeness enhancement originates in the underlying event.

Experiment/Theory

ALICE

Affiliation

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Sitzung Einordnung: Parallel: High-Momentum Hadrons & Correlations

Track Klassifizierung: High momentum hadrons and correlations