

Elucidating the origin of the apparent strangeness enhancement with multiplicity in the jet-like region measured in pp collisions at 13 TeV

Content

The ALICE collaboration has measured the production of K^0_S and Λ^0 in pp collisions at $\sqrt{s}=13\text{TeV}$ in the directed-to-leading and the toward-leading (jet-like) regions. Although the enhancement in the transverse-to-leading region, which is sensitive to the underlying event, can be understood as due to medium(-like) effects, the enhancement in the jet-like region is striking. The effect in the jet-like region is qualitatively reproduced by PYTHIA8 with rope hadronization and $E_{pT}^{\text{free}}/E_{pT}^{\text{leading}}$ threshold for angular correlation studies involving high p_T hadrons is reported, where the leading particle leading threshold, the apparent strangeness enhancement in the jet-like region can be explained in terms of a bias due to the misidentification of the leading particle.

Summary

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