

10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Contribution ID: 186

Type: Poster

Monte Carlo Studies of Correlations between Leading Hadrons and Jets

Tuesday, June 2, 2020 7:30 AM (1h 20m)

Renewed interest in the question of QGP formation in small systems (pp, pA) has revived investigations into whether there is jet modification associated with these collision systems. One such modification of interest is broadening of jet acoplanarity, which is attributed to jet broadening in the medium. While this broadening has not been observed in minimum bias events at the LHC, ALICE data for pp collisions at 13 TeV suggests such an effect may be present in high multiplicity pp events. This broadening cannot be considered as evidence of QGP formation, however, until other possible explanations for its observation are dismissed. A possible contributing effect relates to the spatial distribution of trigger hadrons and the extent to which they serve as proxies for their associated jets. For this purpose, and to address other potential contributing factors, studies of correlations between jets and leading hadrons using PYTHIA 8 will be presented.

Collaboration (if applicable)

Track

Jets and High Momentum Hadrons

Contribution type

Poster

Primary author: BEATTIE, Caitie (Yale University)

Presenter: BEATTIE, Caitie (Yale University)

Session Classification: Poster session

Track Classification: Jets and High Momentum Hadrons