



Contribution ID: 521

Type: Poster

Energy-energy correlator measurements in pp and pPb collisions at 5.02 TeV with ALICE

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

Energy-energy correlators (EEC) have been proposed to study the structure of energy flow within jets. These functions are defined as the energy-weighted cross-section of particle pairs inside jets. The correlation as a function of pair distance and jet transverse momentum offers a clear separation between the perturbative and non-perturbative regimes, where one can probe the dynamics of quarks and gluons and their confinement into hadrons. In this work, using data from the ALICE experiment, we present measurements of 2-point EECs in p-Pb collisions at 5.02 TeV. By comparing these results to a p-p baseline, we can study the changes to jet dynamics caused by interactions between color charges and a cold nuclear medium. In particular, we can look into how the presence of cold nuclear matter modifies the hadronization mechanism.

Category

Experiment

Collaboration (if applicable)

ALICE

Primary author: NAMBRATH, Anjali (University of California Berkeley (US))

Presenter: NAMBRATH, Anjali (University of California Berkeley (US))

Session Classification: Poster Session

Track Classification: Jets