

11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Beitrag ID: 141

Typ: Poster

Measurement of jet performance in proton-lead collisions in the ATLAS experiment

Dienstag, 28. März 2023 18:15 (2 Stunden)

Jets can be copiously produced in heavy-ion collisions at the LHC energies. Their calibration is crucial for precise measurements of various processes, such as top-quark pair production. The poster presents the measurement of jet energy scale and resolution in proton-lead collisions collected at 8.16 TeV in 2016. The balance between Z boson and jet transverse momenta is explored for jet $p_T > 20$ GeV and $|\eta| < 2.5$ to estimate jet performance in both data and simulation. The performance of two jet definitions, referred to as EMPFlow and HJJets, is studied and results are compared including systematic uncertainties. The presented results are a key input to the ongoing analysis of top-quark pair production in p+Pb collisions.

Experiment/Theory

ATLAS

Affiliation

ATLAS Collaboration

Hauptautor: POTĘPA, Patrycja (AGH University of Science and Technology / Johannes Gutenberg Universitaet Mainz)

Vortragende(r): POTĘPA, Patrycja (AGH University of Science and Technology / Johannes Gutenberg Universitaet Mainz)

Sitzung Einordnung: Poster Session

Track Klassifizierung: Heavy flavor and quarkonia