DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 62 Type: Parallel talk

Measurements of W and Z boson production in association with heavy flavor at ATLAS

Tuesday, 28 March 2023 10:00 (20 minutes)

The production of W/Z bosons in association with heavy flavor jets or hadrons at the LHC is sensitive to the flavor content of the proton and provides an important test of perturbative QCD. We present the production of Z bosons in association with b-tagged large radius jets. The result highlights issues with modelling of additional hadronic activity and provides distinction between flavor-number schemes used in theoretical predictions. Moreover, the production of W boson in association with D+ and D*+ mesons will be discussed. This precision measurement provides information about the strange content of the proton. Measurements are compared to the state-of-the art NLO theoretical calculations.

Submitted on behalf of a Collaboration?

Yes

Participate in poster competition?

No

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