

# Measurements of W and Z boson production in association with jets in ATLAS

*Thursday 18 July 2024 09:15 (15 minutes)*

The production of W/Z bosons in association with light or 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. In this talk, measurements by the ATLAS experiment probing the charm and beauty content of the proton are presented. Inclusive and differential cross-sections of Z boson production with at least one c-jet, or one or two b-jets are measured for events in which the Z boson decays into a pair of electrons or muons. Moreover, the production of W boson in association with D<sup>+</sup> and D<sup>\*+</sup> mesons will be discussed. This precision measurement provides information about the strange content of the proton. Finally, measurements of inclusive, differential cross sections for the production of missing transverse momentum plus jets are presented.

## Alternate track

1. Top Quark and Electroweak Physics

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Yes

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