

Measurement of the WZ inclusive cross section at 13.6 TeV with CMS

Thursday 18 July 2024 20:40 (20 minutes)

The first inclusive cross section measurements for the diboson production of a W and a Z bosons (WZ) in proton-proton collisions at a centre-of-mass energy of 13.6 TeV are presented. The data used were recorded with the CMS detector of the LHC during 2022. Events containing three electrically charged leptons in the final state, which can be electrons or muons, are analysed. The selection is optimized to minimize the number of background events thanks to the usage of a very efficient prompt lepton discrimination strategy and a tagging algorithm that efficiently associates the three leptons to its correspondent parent boson. After selection, the cross section is extracted separately for each lepton flavor multiplicity category, as well as in a simultaneous likelihood fit to all the categories.

Alternate track

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Session Classification: Poster Session 1

Track Classification: 04. Top Quark and Electroweak Physics