



Measurement of the WZ production cross section at 8 TeV and 13 TeV and limits on anomalous triple gauge couplings with the ATLAS detector (13' + 2')

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Measurements of the cross sections of the production of pairs of electroweak gauge bosons at the LHC constitute stringent tests of the electroweak sector of the Standard Model and provide a model-independent means to search for new physics at the TeV scale.

The ATLAS collaboration has performed detailed measurements of integrated and differential cross sections of the production of WZ pairs in fully leptonic final states using data corresponding to 20.3 /fb at a centre-of-mass energy of 8TeV. These measurements include ratios of WZ pairs separated by the charge of the W boson for the first time. The results are compared to predictions at NLO in pQCD and provide constraints on new physics, by setting limits on anomalous triple gauge couplings.

Finally, a first measurement of WZ cross sections at a center-of-mass energy of 13 TeV using data corresponding to 3.2 /fb will be presented including the ratios to previous ATLAS measurements at 8 TeV and between W charges.

Presenter: GUTSCHOW, Christian (TU Dresden (DE))

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