

Double parton scattering in same-sign WW production at ATLAS

The first measurement of double parton scattering in same-sign W boson pair production with the ATLAS detector is presented. The data set used corresponds to an integrated luminosity of 140 fb^{-1} of proton–proton collisions at a center-of-mass energy of 13 TeV, collected during Run 2 of the Large Hadron Collider. The study is performed in final states including two same-charge leptons, electron or muon, missing transverse momentum, and up to one jet. An excess of events is observed over the expected background contributions with a significance of 8.8 standard deviations. The fiducial cross sections are presented.

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