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Anomalous Photon-Gauge-Boson Coupling Contribution to the Exclusive Vector Boson Pair Production from Two Photon Exchange in pp Collision at 8 TeV

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We study the W/Z pair production from two photon exchange in pp collisions at the LHC in order to evaluate the contributions of anomalous photon-gauge-boson couplings, predicted in many Standard Model (SM) extensions. We start by reproducing the total cross section for W+ W- production and we present the lepton invariant mass distribution corresponding to the SM signal with pT (e mu) > 30 GeV. Next, we consider the anomalous couplings by calculating the Z pair production process by considering a 1 TeV scale for new physic effects. We calculate the total cross section and we present the transverse momentum distribution for the fully leptonic final state with zero extra tracks.

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