

Abstract Submitted
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Searches for New Physics using $W\gamma$ production at the LHC ALFRED GOSHAW, Duke University, ATLAS COLLABORATION — Measurements of high energy photons produced in association with W bosons are measured using pp collisions at $\sqrt{s} = 7$ TeV. The analyses use a data sample with an integrated luminosity of 4.6 fb^{-1} collected by the ATLAS detector during 2011 LHC data taking. Events are selected using leptonic decays of the W boson ($e\nu, \mu\nu$) with the requirement of an associated isolated photon with transverse energy greater than 15 GeV. The data are used to test the electroweak sector of the Standard Model and search for possible evidence for new phenomena. The measurements are used to probe anomalous $WW\gamma$ triple gauge-boson couplings and to search for the production of new resonances decaying to $W\gamma$ final states.

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