

Abstract Submitted
for the TSF11 Meeting of
The American Physical Society

Test of the diphoton + missing transverse energy background model in ATLAS KAMILE YAGCI, Southern Methodist University, ATLAS COLLABORATION — I present the data and MC comparisons for the selection variables of the two photon + E_T^{miss} final state in ATLAS experiment. The data is taken from the proton-proton collisions of the 7 TeV center of mass energy at the Large Hadron Collider. The data sample studied was the initial 3.1 pb^{-1} taken in the 2010 run. This analysis excluded the gravity mediated One Universal Extra Dimension model with $\Lambda R=20$, $N=6$ and $M_D = 5 \text{ TeV}$ for a curvature $1/R \leq 725 \text{ GeV}$ at 95% C.L., where Λ is the cutoff scale, N is the number of large extra dimensions and M_D is the $(4+N)$ -dimensional Planck scale.

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Date submitted: 08 Sep 2011

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