## Abstract Submitted for the APR12 Meeting of The American Physical Society

Search for Gauge Mediated Supersymmetry Breaking in Events with Two Photons and Missing Energy Using the CMS Detector at the LHC YUEH-FENG LIU, Carnegie Mellon University, CMS COLLABORATION — We present a search for Gauge Mediated Supersymmetry Breaking with two photons and large missing transverse energy in the final state using the CMS experiment at the Large Hadron Collider. The analysis is based on pp collision data at  $\sqrt{s} = 7$  TeV comprising an integrated luminosity of 4.7 fb<sup>-1</sup>. We compare the missing transverse energy distribution with the spectrum expected from Standard Model processes and present the latest results based on the 2011 CMS dataset.

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Date submitted: 04 Jan 2012 Electronic form version 1.4