Abstract Submitted for the APR09 Meeting of The American Physical Society

Setting Limits on Gauge Mediated Supersymmetry Breaking Models with Photons at CDF EUNSIN LEE, Texas A&M University, CDF COLLABORATION — Models of supersymmetry predict new heavy, neutral particles, known as a neutralino, that can decay to a photon and the lightest supersymmetric particle, the gravitino. We present a search for these particles in proton anti-proton collisions at $\sqrt{s}=1.96$ TeV at the Collider Detector at Fermilab. After years of data taking we find no evidence for this process and set the world's best limits on models of Gauge Mediated Supersymmetry Breaking.

> Benjamin Brau University of Massachusetts

Date submitted: 08 Jan 2009

Electronic form version 1.4