Abstract Submitted for the APR16 Meeting of The American Physical Society

A search for supersymmetry in events containing a leptonically decaying Z boson, jets and missing transverse momentum in sqrt(s) = 13 TeV pp collisions with the ATLAS detector TOVA HOLMES, Lawrence Berkeley National Lab, ATLAS COLLABORATION — A search for supersymmetric particles decaying to a Z boson, jets, and invisible particles is presented. The search is performed using 3.2 fb-1 of sqrt(s) = 13 TeV proton-proton collisions recorded by the ATLAS detector at the Large Hadron Collider and investigates a three-sigma excess of events seen in 8 TeV collisions in 2012 in a similar final state. The results are interpreted using a simplified model in which gluinos are produced and subsequently decay via the second lightest neutralino to Z bosons and lightest supersymmetric particles.

Tova Holmes Lawrence Berkeley National Lab

Date submitted: 04 Jan 2016

Electronic form version 1.4