Abstract Submitted for the 4CF11 Meeting of The American Physical Society

SUSY Searches at ATLAS in Multilepton Final States with Jets and Missing Transverse Energy CALEB LAMPEN, University of Arizona, ATLAS COLLABORATION — The Large Hadron Collider (LHC) is home to the most energetic pp collisions in the world today, making it the premier location to perform direct searches for Beyond the Standard Model (BSM) physics such as Supersymmetry (SUSY). We present a search, using the ATLAS detector at the LHC, for SUSY with a final state signature of at least three leptons, moderate missing transverse energy, and multiple jets. These multilepton SUSY modes do not receive much background contribution from Standard Model process, and thus serve as powerful probes of BSM physics.

Caleb Lampen University of Arizona

Date submitted: 18 Sep 2011 Electronic form version 1.4