

Abstract Submitted
for the APR17 Meeting of
The American Physical Society

A search for BL R-parity-violating top squark decays in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS detector IAN DYCKES, Univ of Pennsylvania, ATLAS EXPERIMENT COLLABORATION — A search for pair produced massive particles decaying to b-quarks plus leptons is presented using the $\sqrt{s} = 13$ TeV proton-proton collision data collected with the ATLAS detector at the LHC in 2016. This search is motivated by a B-L extension to the MSSM, in which the scalar partner of the top quark (the stop) may be the Lightest Supersymmetric Particle (the LSP). In this model, the stop predominantly decays via an R-Parity violating coupling to a b-quark plus a lepton. This model is targeted by searching for an excess in final states containing b-tagged jets and two light leptons (electrons or muons).

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Date submitted: 30 Sep 2016

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