

Abstract Submitted  
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**A search for leptoquarks with the ATLAS detector** BURTON DEWILDE, Stony Brook University, ATLAS COLLABORATION — Leptoquarks are hypothetical bosons that couple directly to both quarks and leptons, assumed to be of the same generation. They appear in a variety of theories beyond the Standard Model. The results of a search for pair production of scalar leptoquarks are presented for final states consisting of either two oppositely charged leptons (electrons or muons) and at least two jets, or a lepton plus missing transverse energy and at least two jets. A total of 1.0/fb of data recorded by the ATLAS detector at  $\sqrt{s} = 7$  TeV is used for the search. Event yields in the signal regions are checked for consistency with Standard Model background expectations, and limits are derived for leptoquark production cross-sections as a function of the branching fraction of a leptoquark decaying to a lepton and a quark.

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