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The Search for Pair Production of Second Generation Scalar Leptoquarks in pp Collisions at sqrt(s) = 7 TeV DARIN BAUMGARTEL, Northeastern University, CMS COLLABORATION — A search for pair production of second generation scalar leptoquarks is presented in the final states with two jets and either two muons or one muon and one neutrino. The data sample used corresponds to 34 pb^{-1} of integrated luminosity collected at the CMS detector at the LHC. The number of observed events is in good agreement with standard model processes. An upper limit is set for beta as a function of leptoquark mass, where beta is the branching fraction of a leptoquark into a lepton and a quark. Leptoquarks with masses below 394 GeV are excluded for $\beta = 1$, and masses below 297 GeV are excluded for $\beta = 1/2$. These limits are the most stringent to date.

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