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Search for third generation leptoquarks with the DØ detector SERGEY UZUNIAN, Northern Illinois University, DZERO COLLABORATION — Leptoquarks are exotic particles that carry color, electric charge, and lepton number, which appear for example in extended gauge theories and composite models. It is expected that leptoquarks come in three generations, corresponding to the usual three quark and lepton families. A search for charge 1/3 third-generation leptoquarks pair-produced in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV has been performed in data collected by the DØ detector at the Fermilab Tevatron. Such leptoquarks would decay either into a tau-neutrino and a b-quark or, if heavy enough, into a tau-lepton and a t-quark. Preliminary results are reported for the case where both leptoquarks decay into neutrinos, which leads to a final state consisting of two b-quarks with missing transverse energy.

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