

Abstract Submitted
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Search for pair production of third generation leptoquarks in the $\tau\tau b\bar{b}$ final state with the D0 detector YUAN HU, State University of New York, Stony Brook, D0 COLLABORATION — We report the search for the third generation leptoquarks in $p\bar{p}$ collisions at a center-of-mass energy of $\sqrt{s} = 1.96$ TeV using data with an integrated luminosity of 982 pb^{-1} collected by the D0 detector at Run II of the Fermilab Tevatron. Leptoquarks are assumed to be pair produced and each decays into a τ lepton and a b quark with a branching ratio $\beta = 100\%$. The signature is a di- τ plus di-b-jet final state where one τ is required to decay into a μ and the other τ decays hadronically. No evidence for third generation leptoquarks production is observed, and limits are set on $\sigma(p\bar{p} \rightarrow \text{LQ3}\overline{\text{LQ3}} \rightarrow \tau^+ b \tau^- \bar{b})$.

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