

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Search for a fourth generation t' quark that decays to W boson + jet JEONG KU LIM, Korea University, DOOKEE CHO, Brown University, D0 COLLABORATION — We present a search for pair-production of a fourth generation t' quark with its antiparticle, followed by their decays to Wq , based on 5.3 fb^{-1} of proton-antiproton collisions at $\sqrt{s} = 1.96 \text{ TeV}$ collected by the D0 experiment at the Fermilab Tevatron. We compare the reconstructed mass of the t' quark from lepton+jets final states and the scalar sum of the momenta of all observed objects in the event to Standard Model expectations to search for signals of new physics. We set upper limits on the $t'\bar{t}'$ production cross section.

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Date submitted: 10 Jan 2011

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