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Search for associated production of a standard model Higgs boson and a $t\bar{t}$ pair in the missing transverse energy plus jets final state at CDF HYUN SU LEE, University of Chicago, CDF COLLABORATION — We present a search for a standard model Higgs boson produced in association with a top and anti-top quark pair using 5.7 fb^{-1} of 1.96 TeV $p\bar{p}$ collisions from the Fermilab Tevatron collected with the CDF II detector. We select events that have large missing transverse energy and at least five jets, two or more of which are tagged as originating from b-quarks. We exclude events containing any high energy leptons to avoid events used in other Higgs searches at CDF. Although the cross section of the final state is much smaller than that of Higgs production in the dominant search channels, the event topology is distinct, making it an interesting channel to study. This measurement complements other searches for the Higgs boson and it can easily be combined with these other search results to improve overall Tevatron sensitivity to a standard model Higgs boson.

Eric James
Fermi National Accelerator Laboratory

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