

Abstract Submitted
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Search for standard model Higgs boson production in association with a W boson at CDF MARTIN FRANK, Baylor University, CDF COLLABORATION — We present a search for a standard model Higgs boson produced in association with a W boson using data collected with the CDF II detector from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. The search is performed in the $WH \rightarrow l\nu b\bar{b}$ channel. The two quarks usually fragment into two jets, but sometimes a third jet can be produced via gluon radiation, so we have increased our data sample by including events that contain three jets. We reconstruct the Higgs boson using two or three jets depending on the kinematics of the event. We find an improvement in our search sensitivity using the larger sample together with this multi-jet reconstruction technique. In the absence of an excess in data, we set an upper limit on the production rate times branching ratio.

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