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Search for SM Higgs in associated production with a W boson in the $\tau\nu b\bar{b}$ final state at CDF ELISABETTA PIANORI, University of Pennsylvania, CDF COLLABORATION — We present a search for the associated production of a standard model (SM) Higgs boson and a W boson in data collected by the CDF detector in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV corresponding to $2{\rm fb}^{-1}$ of integrated luminosity. The search is performed using events containing two jets, a hadronically decaying τ lepton and missing transverse energy corresponding to the decay products expected from the decays of $H\to b\bar{b}$ and $W\to \tau\nu$. A binned likelihood fit of the dijet mass to the expectations for signal and background is performed to test for a potential Higgs signal. In the absence of an observed excess, we set upper limits on the production rate times branching ratio for a potential Higgs boson as a function of its mass.

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