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Search for SM Higgs production in association with a W boson using a neural network technique at CDF MARTIN FRANK, Baylor University, CDF COLLABORATION — We present a search for a standard model (SM) Higgs boson produced in association with a W boson from data collected with the CDF detector in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. The search is performed in the $WH \to \ell\nu b\bar{b}$ final state using a data sample corresponding to an integrated luminosity of 4.3 fb^{-1}. A Bayesian neural network is used to improve separation of signal and background. In the absence of an excess in data, we set an upper limit on the production rate times branching ratio as a function of the potential mass of the Higgs boson.

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