

Abstract Submitted
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Search for Higgs Bosons Produced in association with W bosons at CDF JASON SLAUNWHITE, RICHARD HUGHES, The Ohio State University, CDF COLLABORATION — We present a search for the Higgs boson decaying to $b\bar{b}$ pairs and produced in association with a W boson in pp collisions at $\sqrt{s} = 1.96$ TeV. We searched a dataset corresponding to an integrated luminosity of 1.9 fb⁻¹. Our candidate events have one high-pT muon or electron, missing ET, and two jets. We increased the purity of our sample by using advanced techniques to identify several categories of jets with b-quarks. We further improved our discrimination of Higgs signal from W+jet backgrounds through the use of an artificial neural network. We combined our searches in the separate tag categories and set a 95% Confidence Level upper limit on the production cross section times branching ratio.

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