

Abstract Submitted
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Search for Higgs boson production in association with a W boson at CDF TATSUYA MASUBUCHI, YOSHIO ISHIZAWA, SHINHONG KIM, Tsukuba, KUNITAKA KONDO, YOSHIAKI KUSAKABE, Waseda, MICHAEL MCFARLANE, JASON NIELSEN, LBNL, ANYES TAFFARD, University of Illinois Urbana-Champaign, WEIMING YAO, LBNL, CDF COLLABORATION — We present a search for the Higgs boson decaying to $b\bar{b}$, produced in association with a W boson in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. A dataset corresponding to an integrated luminosity of 1.2 fb^{-1} is used in this search. Selected events have one high- p_T electron or muon, missing E_T and two jets. In addition, we apply advanced event selection criteria and optimized b-tagging strategies to reduce the large W +jet backgrounds and improve the search sensitivity. We set a 95% Confidence Level upper limit with the combined one b-tag and two b-tag samples, on the production cross section times branching ratio as a function of the mass of the Higgs boson.

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