

Abstract Submitted
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Search for associated production of W/Z and Higgs bosons in missing transverse energy plus b -quark jets final states at CDF QI-UGUANG LIU, Purdue University, CDF COLLABORATION — We present a search for the standard model Higgs boson produced in association with a W or Z boson at $\sqrt{s} = 1.96$ TeV with the CDF II detector at the Fermilab Tevatron. The search is performed in events with a large imbalance in transverse energy, and one or two b -tagged jets using up to 5.8 fb^{-1} of data. State-of-the-art techniques are used in the analysis to model the dominant QCD background and separate backgrounds from the signal. The validity of these techniques is illustrated by a measurement of top pair production using the same analysis tools. It is the first top pair measurement in events with large missing transverse energy and one or two b -quark tagged jets. The precisely measured top pair production strongly supports the Higgs searches performed in this channel.

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