

Abstract Submitted
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Search for Higgs Boson Production via the Process $p\bar{p} \rightarrow ZH \rightarrow l^+l^-b\bar{b}$ at CDF JONATHAN EFRON, BENJAMIN KILMINSTER, BRIAN WINER, RICHARD HUGHES, Ohio State University, CDF COLLABORATION — We are conducting a search for the Higgs boson via the process $p\bar{p} \rightarrow ZH \rightarrow l^+l^-b\bar{b}$ using 300 pb^{-1} of data from CDF Run II. The Higgs Boson is predicted by the Standard Model but has yet to be observed. The main background of this ZH signal is $Z + b\bar{b}$, where the Z decays into two charged leptons. The background is distinguished from the signal using an artificial neural network that we have developed. We will report on the status of the search and the future prospects using the anticipated large data samples from Run II.

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