

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Search for associated production of a Z and a Higgs Boson in $\ell b\bar{b}$ final states at D0 EMILY JOHNSON, Michigan State University, D0 COLLABORATION — A search for the standard model Higgs boson was performed in the channel $ZH \rightarrow \ell b\bar{b}$ with the D0 detector at the Fermilab Tevatron collider with 4.2 fb^{-1} of data. Events are selected with at least two reconstructed jets and a Z candidate reconstructed from the two leptons. A random forest of decision trees was trained to distinguish between signal and background events in two orthogonal b -tag samples. This channel is powerful in the search for a low mass Higgs.

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Date submitted: 10 Jan 2011

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