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Search for Associated Production of Z and Higgs Bosons in $\mu^+\mu^-b\bar{b}$ final states HUISHI DONG, State University of New York, Stony Brook, DZERO COLLABORATION — We present the preliminary results from the DØ experiment at Fermilab on a search for the light mass Standard Model Higgs Boson produced in association with a Z boson in the $\mu^+\mu^-b\bar{b}$ channel. We present an optimized analysis strategy for the most significant background of this process, the QCD production of $b\bar{b}$ associated with the Z boson, and introduce the topological analysis method for the selection and reconstruction of this kind of signals.

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