

Abstract Submitted  
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**Search for Associated Production of Z and Higgs Bosons in  $\nu\nu b\bar{b}$   
Final States** THEODOROS CHRISTOUDIAS, Imperial College, D0 COLLABORATION — Studies are presented from the D0 experiment at Fermilab for the search for a light Standard Model Higgs Boson in association with a Z boson, which decays invisibly to a pair of neutrinos using  $0.9 \text{ fb}^{-1}$  of integrated luminosity of Run II data. This channel relies on the identification of two b-tagged jets from the Higgs Boson decay and on the measurement of a large imbalance in the transverse energy of the event. This channel is challenging as the decay signatures are common in QCD and instrumental backgrounds.

Ulrich Heintz  
Boston University

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