Abstract Submitted for the APR06 Meeting of The American Physical Society

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, D0 COLLABORATION — We present the preliminary studies on the search for a light mass Standard Model Higgs Boson produced in association with a Z boson in the $\mu^+\mu^-b\bar{b}$ channel at DØ Run II. With the available recorded luminosity more than three times the Run I luminosity, we also present our current understanding of the most significant background to this process, namely the QCD production of $b\bar{b}$ associated with the Z boson.

Suyong Choi SungKyunKwan University

Date submitted: 12 Jan 2006 Electronic form version 1.4