

Abstract Submitted
for the APR08 Meeting of
The American Physical Society

Search for SM Higgs Boson Produced in Association with a Z or a W Boson at CDF ARTUR APRESYAN, DANIELA BORTOLETTO, Purdue University, CDF COLLABORATION — We present a search for the Standard Model Higgs boson produced in association with a Z or a W boson in $p\bar{p}$ collisions at 1.96 TeV center of mass energy. The data were collected with the CDF II detector at the Tevatron collider at Fermilab, and correspond to an integrated luminosity of 1.7 fb^{-1} . We consider a scenario where the Z decays into neutrinos or the lepton originating from the W-decay escapes detection and the Higgs decays into a $b\bar{b}$ pair. Therefore the expected signature is missing transverse energy, no leptons, and two b-jets. We present the preliminary results as well as ongoing efforts in this search, such as new approaches of modeling QCD backgrounds and new techniques to increase sensitivity.

Matthew Herndon
University of Wisconsin

Date submitted: 11 Jan 2008

Electronic form version 1.4