

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**Search for Associated Production of W and Higgs Bosons in the  $l\nu bb$  Final State in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV with the Boosted Decision Tree technique** HATIM HEGAB, Oklahoma State University, DZERO COLLABORATION — A search for  $WH$  production in  $p\bar{p}$  collisions performed by the D0 collaboration at a center of mass energy of  $\sqrt{s}=1.96$  TeV is presented. Events selected for this analysis required to have one lepton, missing transverse energy, and one or two  $b$ -tagged jets. The separation of signal and background events was done using Boosted Decision Trees method. Using this technique we expect to improve the sensitivity of the D0 experiment to the standard model Higgs boson search.

Wendy Taylor  
York University

Date submitted: 19 Oct 2009

Electronic form version 1.4