

Abstract Submitted
for the APR08 Meeting of
The American Physical Society

Search for WH to WWW Using Like Sign Dileptons at CDF
TAKAYUKI WAKISAKA, TORU OKUSAWA, YOSHI SEIYA, KAZUHIRO YAMAMOTO, Osaka City, MATTHEW HERNDON, University of Wisconsin, MARK KRUSE, Duke University, CDF COLLABORATION — We present a search for the Higgs boson production in association with a W boson using isolated high-pT like-sign dilepton events in ppbar collisions at $\sqrt{s} = 1.96$ TeV. The data were collected with the CDFII detector at the Tevatron ppbar collider in Fermilab and correspond to an integrated luminosity 1.9 fb⁻¹. This process has a good sensitivity to high mass Higgs (>160 GeV/c²), and if we assume the so-called “fermionophobic Higgs” which only couples to fermion such as the one in the 2HDM-TypeI, this process also has a good sensitivity to low mass Higgs.

Matthew Herndon
University of Wisconsin

Date submitted: 11 Jan 2008

Electronic form version 1.4