Potential for WH Cross Section Measurement

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August 15, 2016

Abstract

 ${
m H}{
m \rightarrow}\, \tau \tau$ reconstructions. total events that are in lep/had higgs window = 2416 0.04832 = Acceptance total events that are in hadronic higgs window = 496 0.00992 = Acceptance total events that are in emu+- higgs window = 238 0.00476 = Acceptance total events that are in electron higgs window = 84 0.00168 = Acceptance total events that are in muon higgs window = 102 0.00204 = Acceptance

All windows are 110 - 140.

1 Acceptances

Higgs lep/had invariant mass

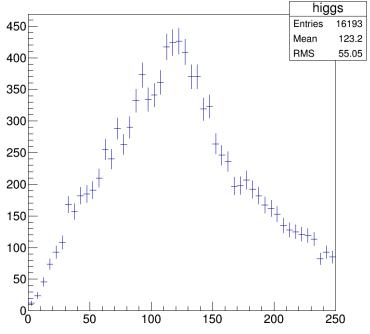


Figure 1: H boson mass for lep+had final state.

Higgs mass from 2 hadronic taus

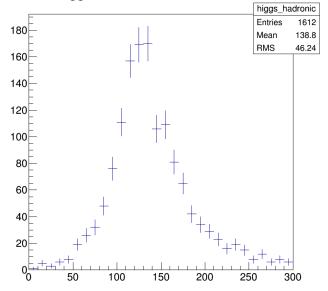


Figure 2: Leading b jets for hadronic final state

Higgs mass form 2 electrons higgs_electron Entries Mean 110.4 RMS 30.59 40 35 30 25 20 15 10 100 200 250 300 150

Figure 3: Leading b jets for electron final state

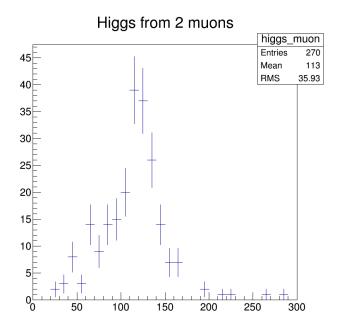


Figure 4: Leading b jets for muonic final state

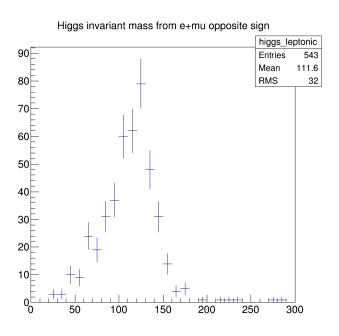


Figure 5: Leading b jets for e+mu opposite sign final state