

ZH branching ratio study

ILC physics and software meeting

July 30. 2010

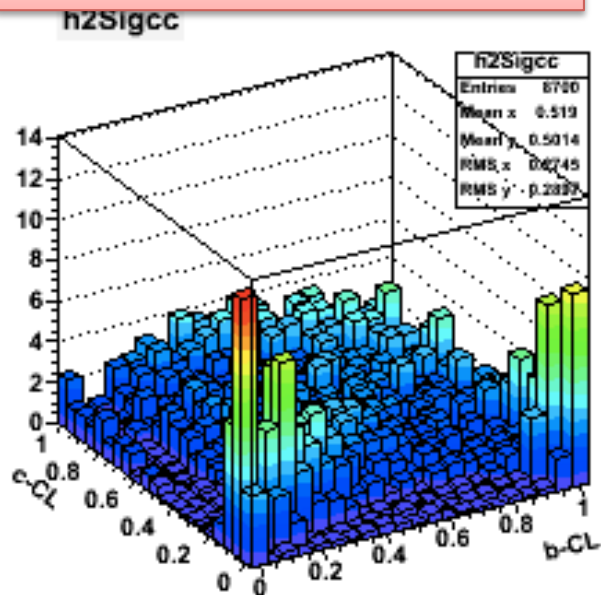
H. Ono (NDU)

Current status

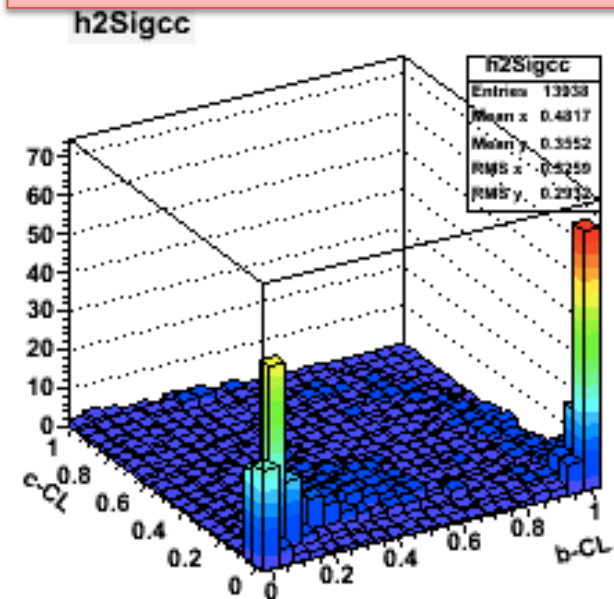
- 250GeV analysis are still in progress...
 - Check template samples without miss combination data
 - $H \rightarrow WW/gg$ branch study start
- Discuss the 350GeV analysis with Miyamoto-san in KEK
 - Slow data transfer reason is understood as KEK grid HPSS system (tape library took few minutes to load files)
 - Some files are failed to reconstruct (\sim kB size data)
 - Confirm several variables to be compared
 - flavor tagging , mass distribution, jets angles, reduction efficiency
- New beam parameters are shown at AD&I meeting
 - 350GeV luminosity is recovered?

C.L. template samples w/o miss paring

including miss jet paring



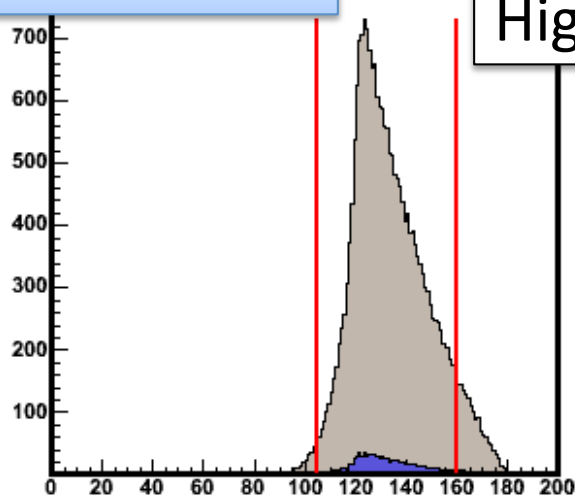
w/o miss jet combination



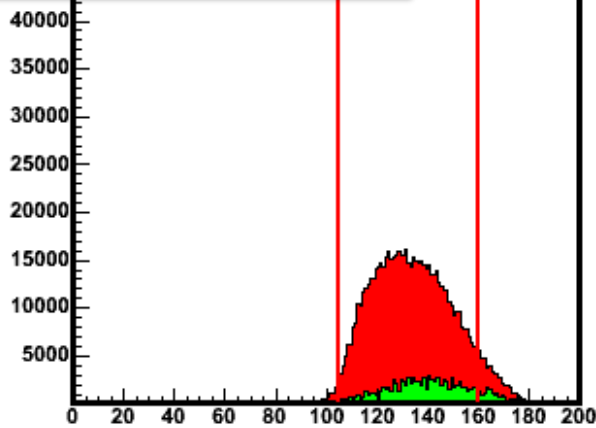
These are not caused by miss jet combination.
Find another reason of these peaks even using CL template sample

Higgs jets angle comparison 250/350 GeV

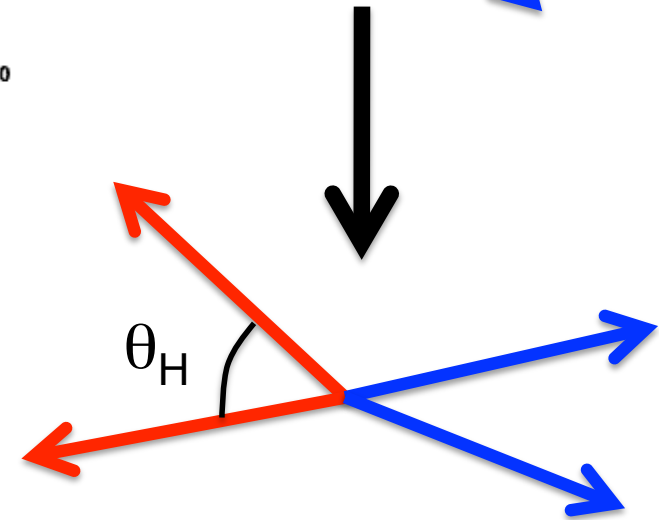
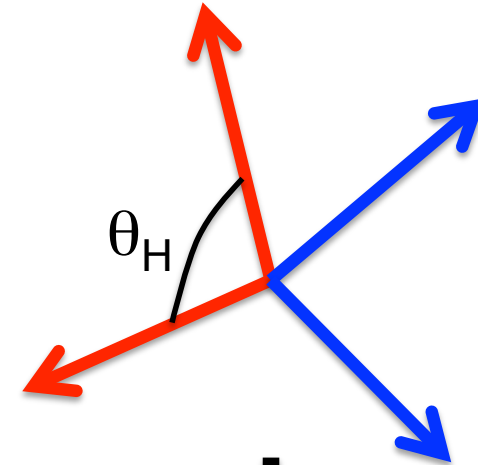
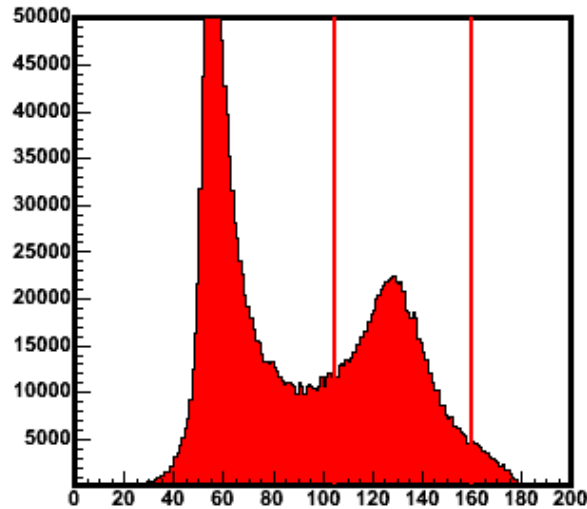
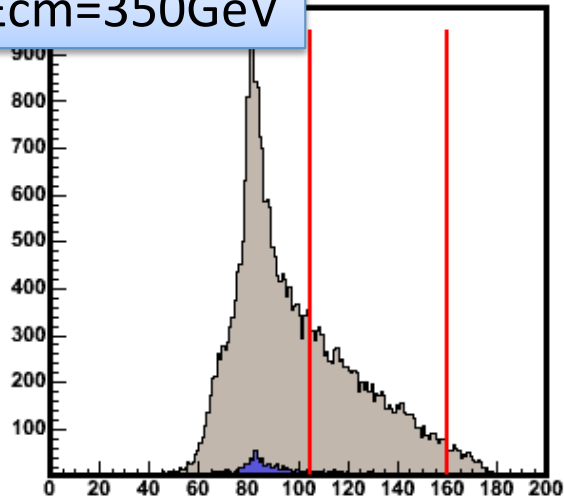
Ecm=250GeV



Higgs jets angle (θ_H)

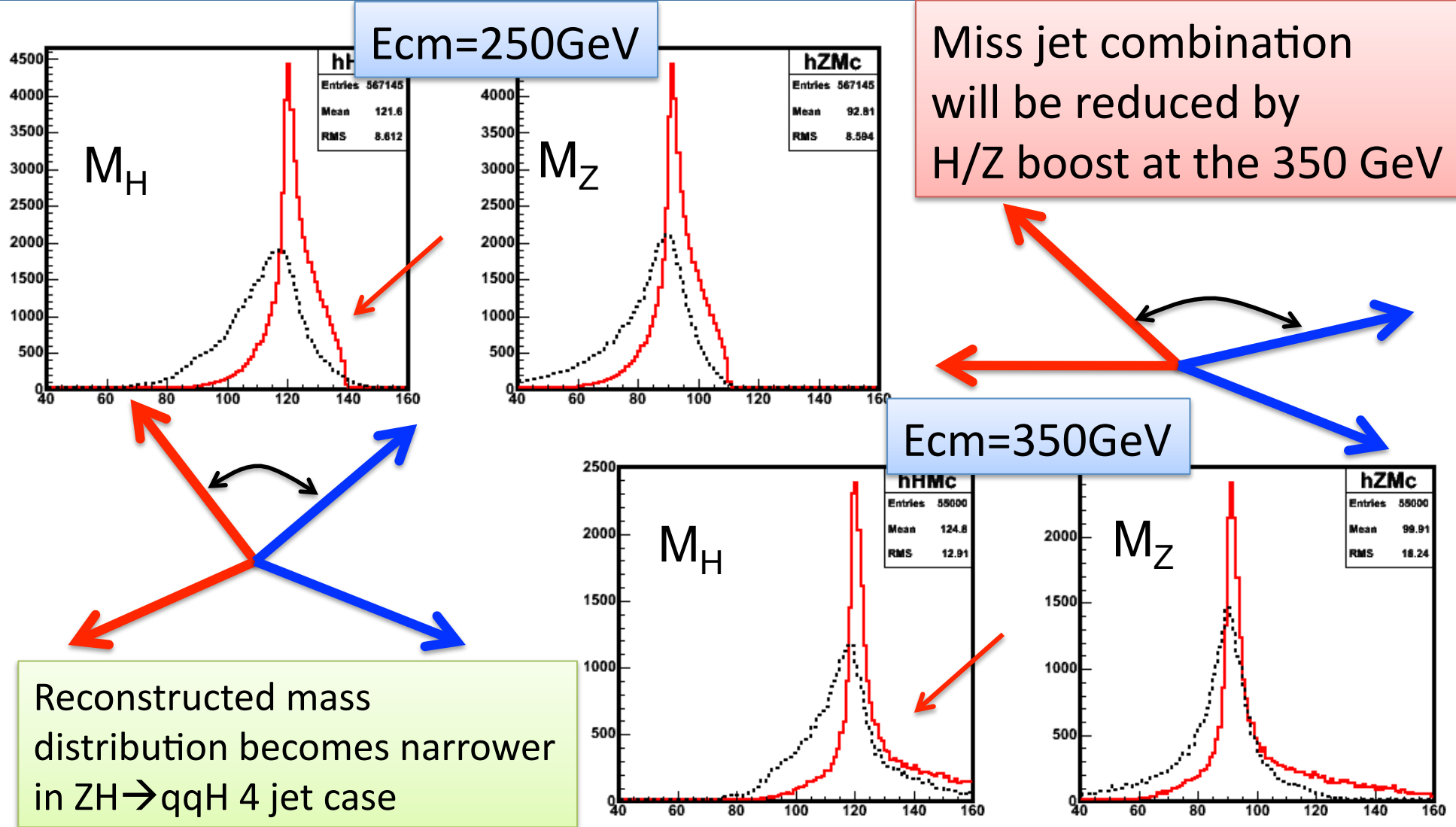


Ecm=350GeV



H/Z boosted at 350 GeV

Higgs mass distribution (red: fitted)



Flavor likeness purity and efficiency

- Purity and efficiency of the flavor tagging should be compared between 250GeV and 350GeV.
- On-going...