ILC physics & software meeting 2026/7/13

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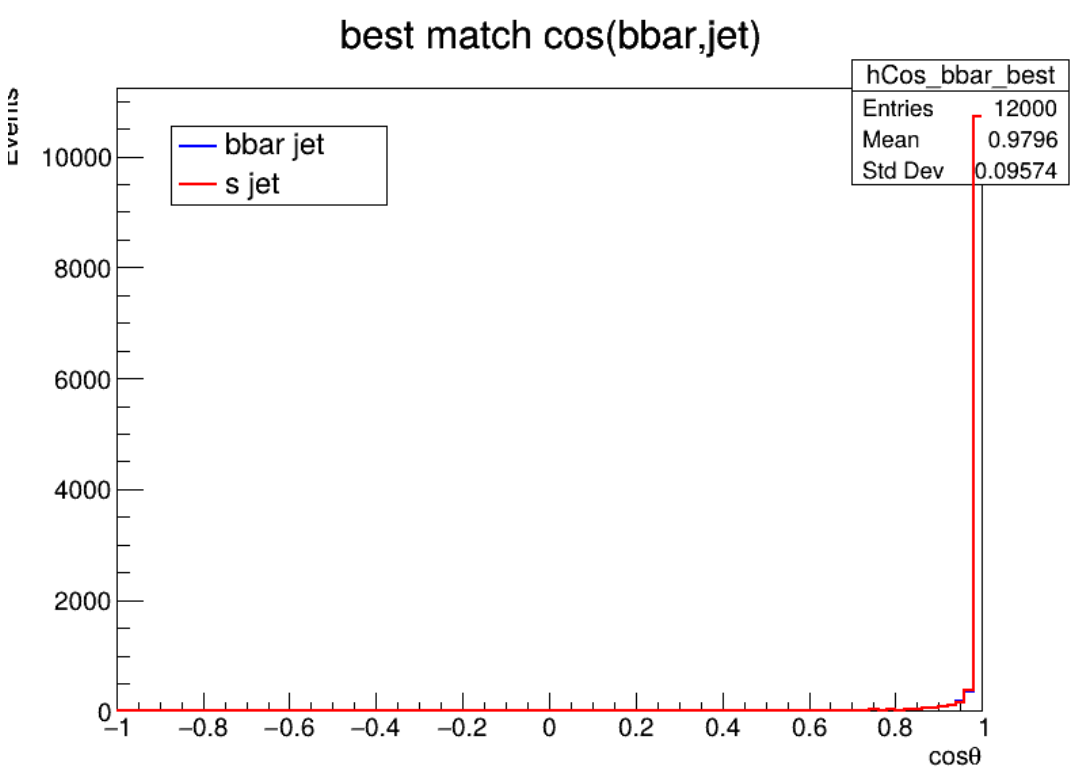
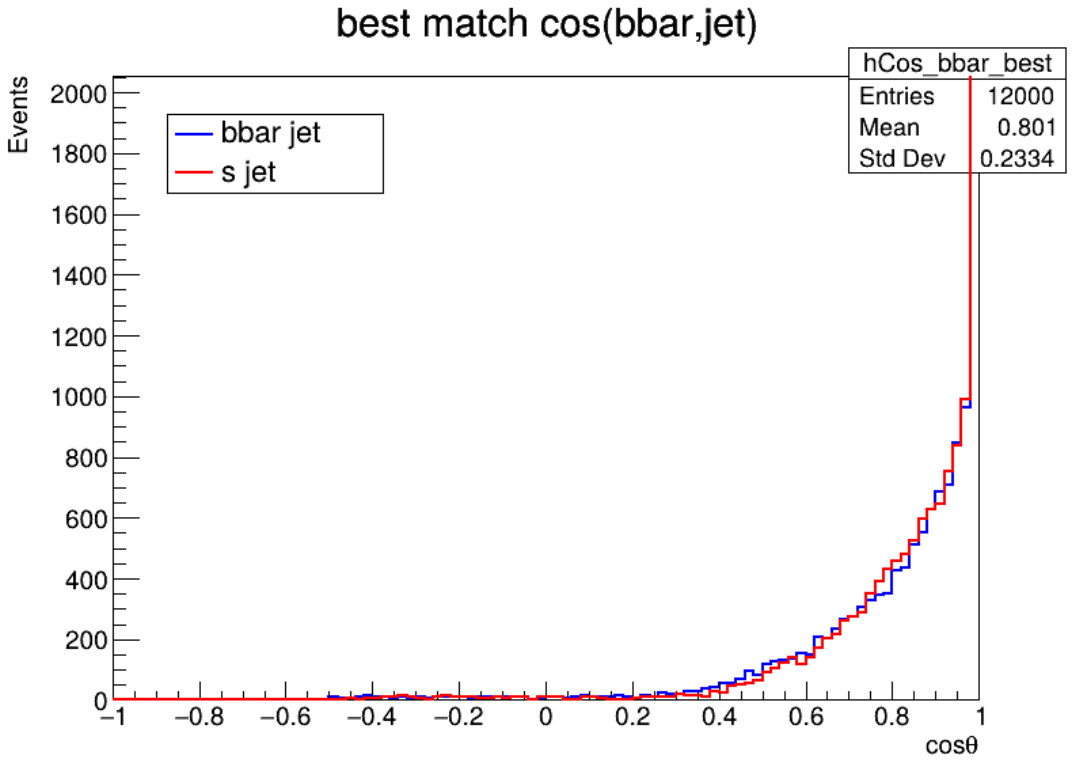
Jet pairing

H->bs/Z-> $\nu\ \nu$



Z -> $\nu\ \nu$ is pretty much in the same direction.

H->bs/Z-> $\mu\ \mu$



I just set the Z decay destination for WHIZARD to e2e2 ($\mu\ \mu$).

➡ The distribution has widened.

➡ I hadn't excluded Isolep…. I'll exclude it and try again.

(And check with junping to make sure the $\mu\ \mu$ event is set up correctly)

Check : dilepton mass

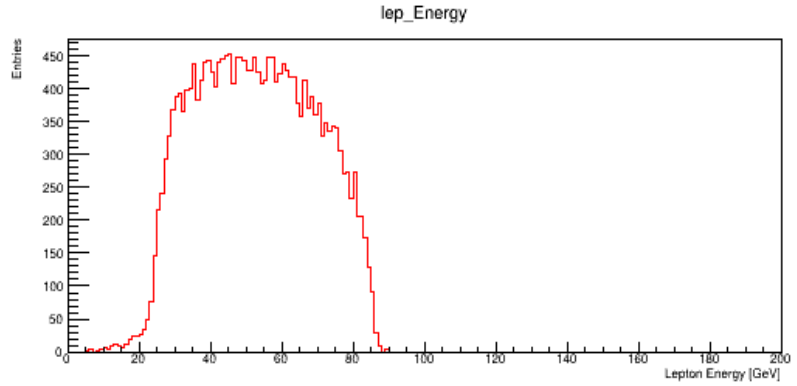
$Z \to \mu\ \mu$

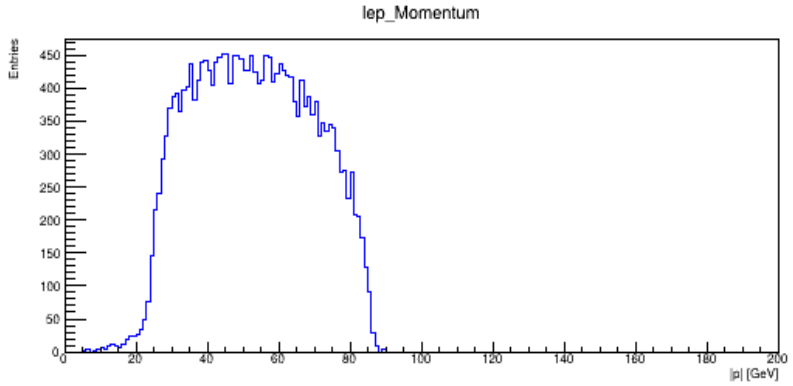
Dilepton mass

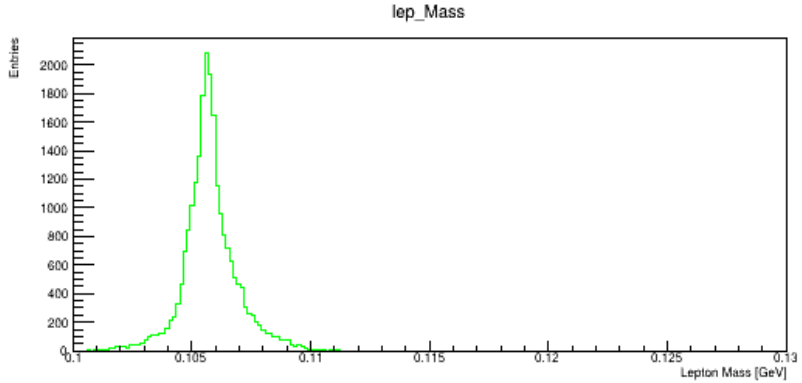
Recoil mass

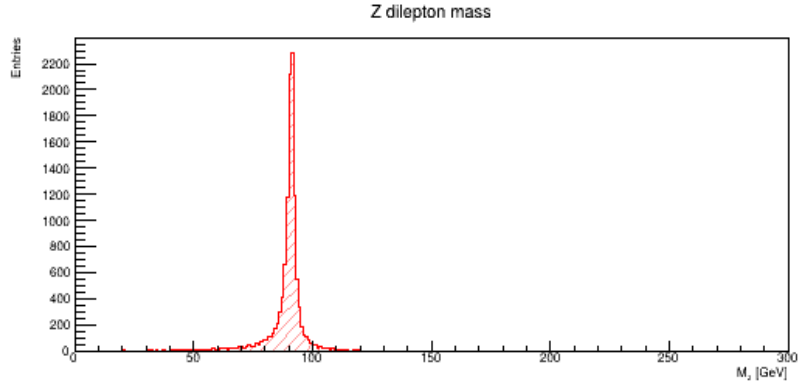
$Z \to \nu\ \nu$

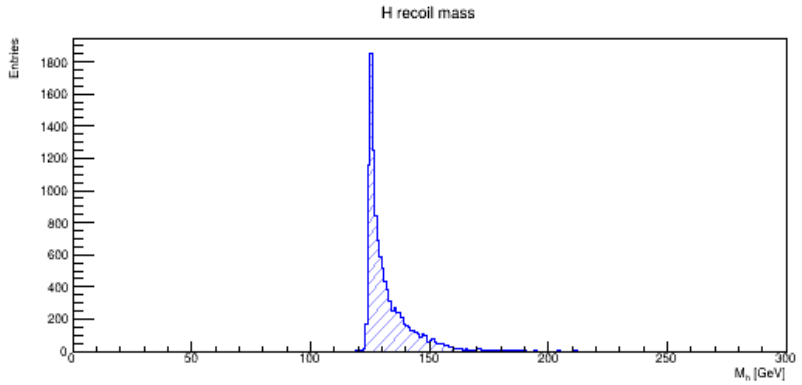
Dilepton mass is 0.











Z dilepton mass (mean) : 89.26 GeV
Z dilepton mass (peak) : 91.50 GeV

H recoil mass (mean) : 132.25 GeV
H recoil mass (peak) : 125.50 GeV

lepton mass (peak) : 105.63 MeV