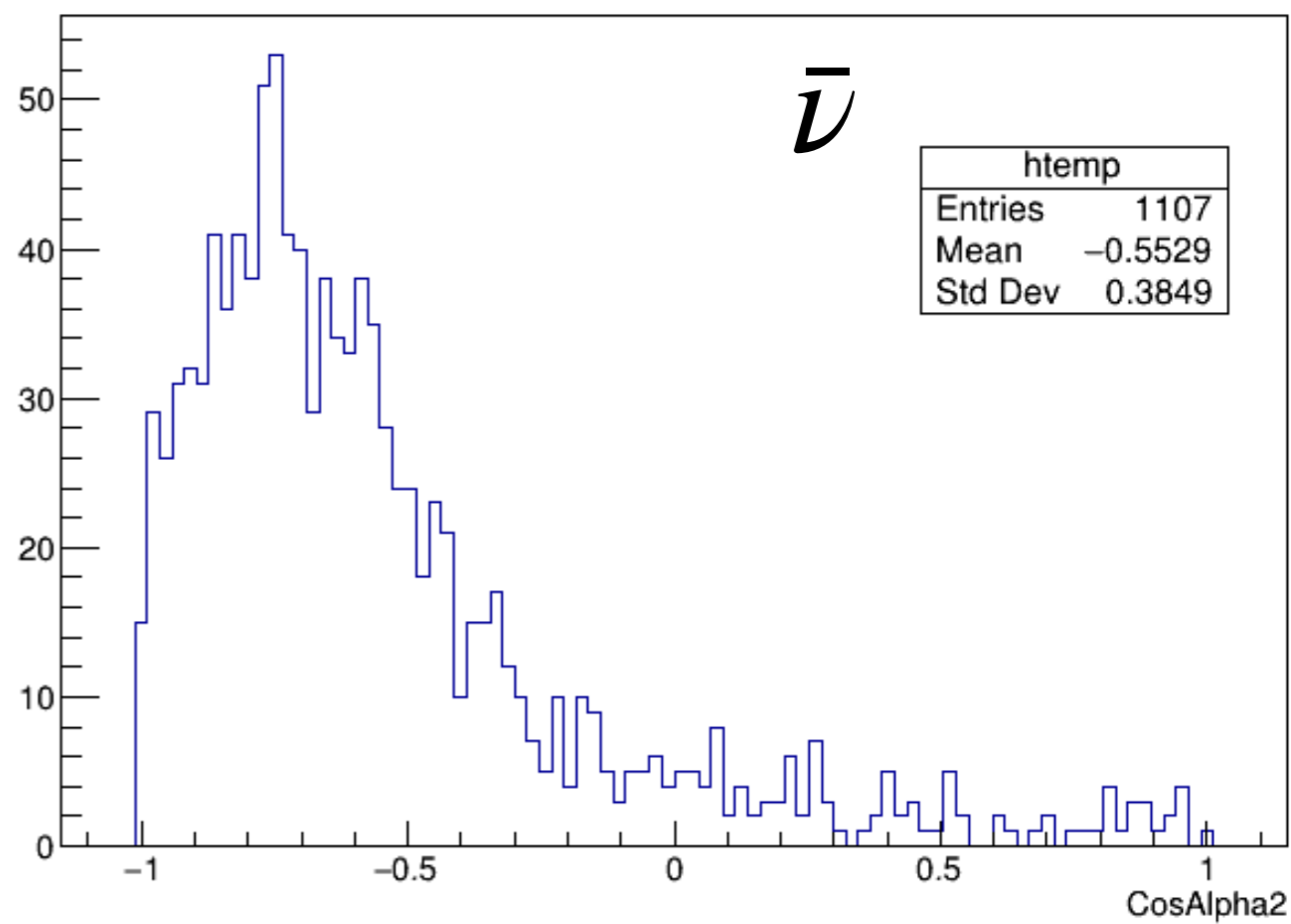
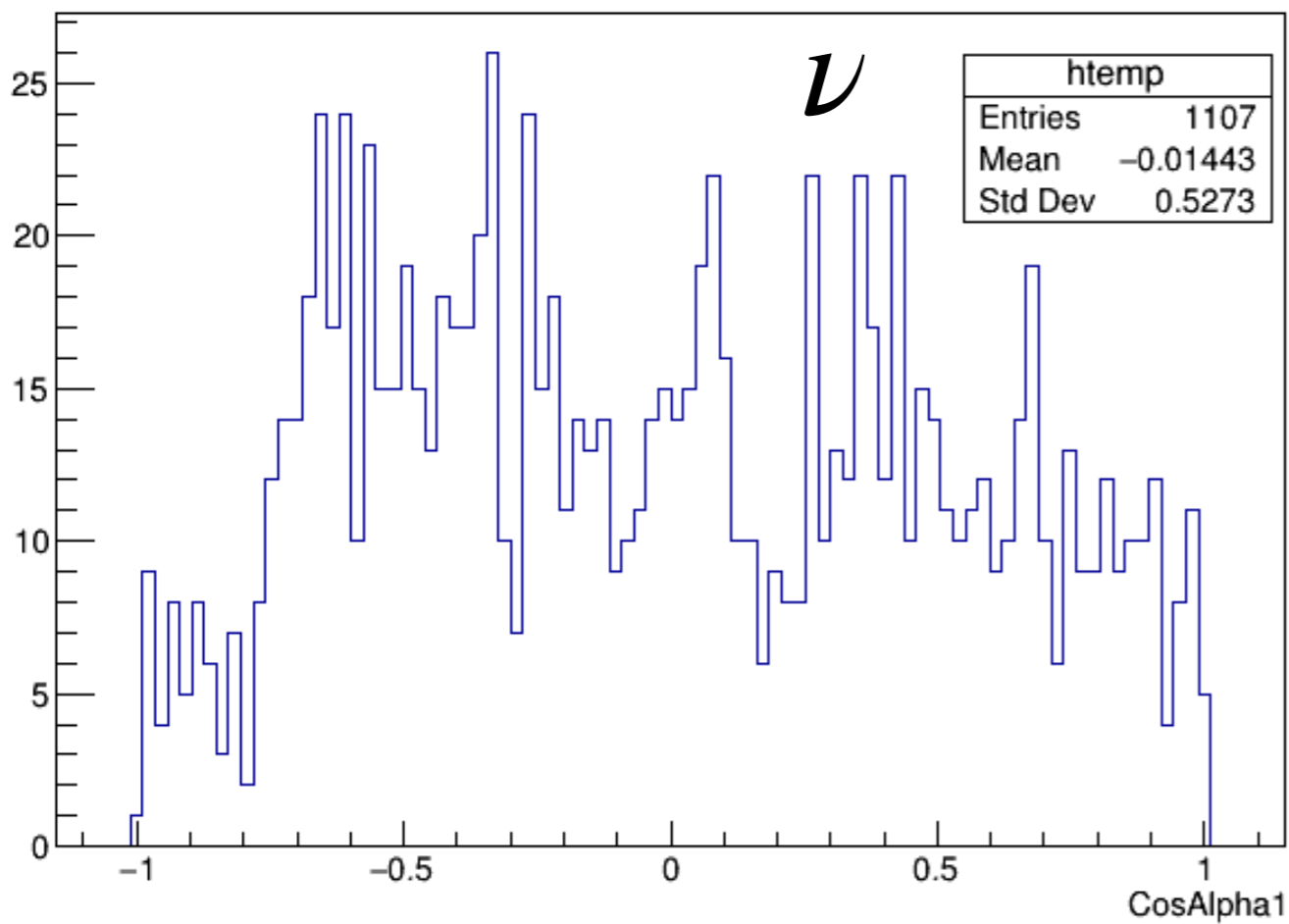
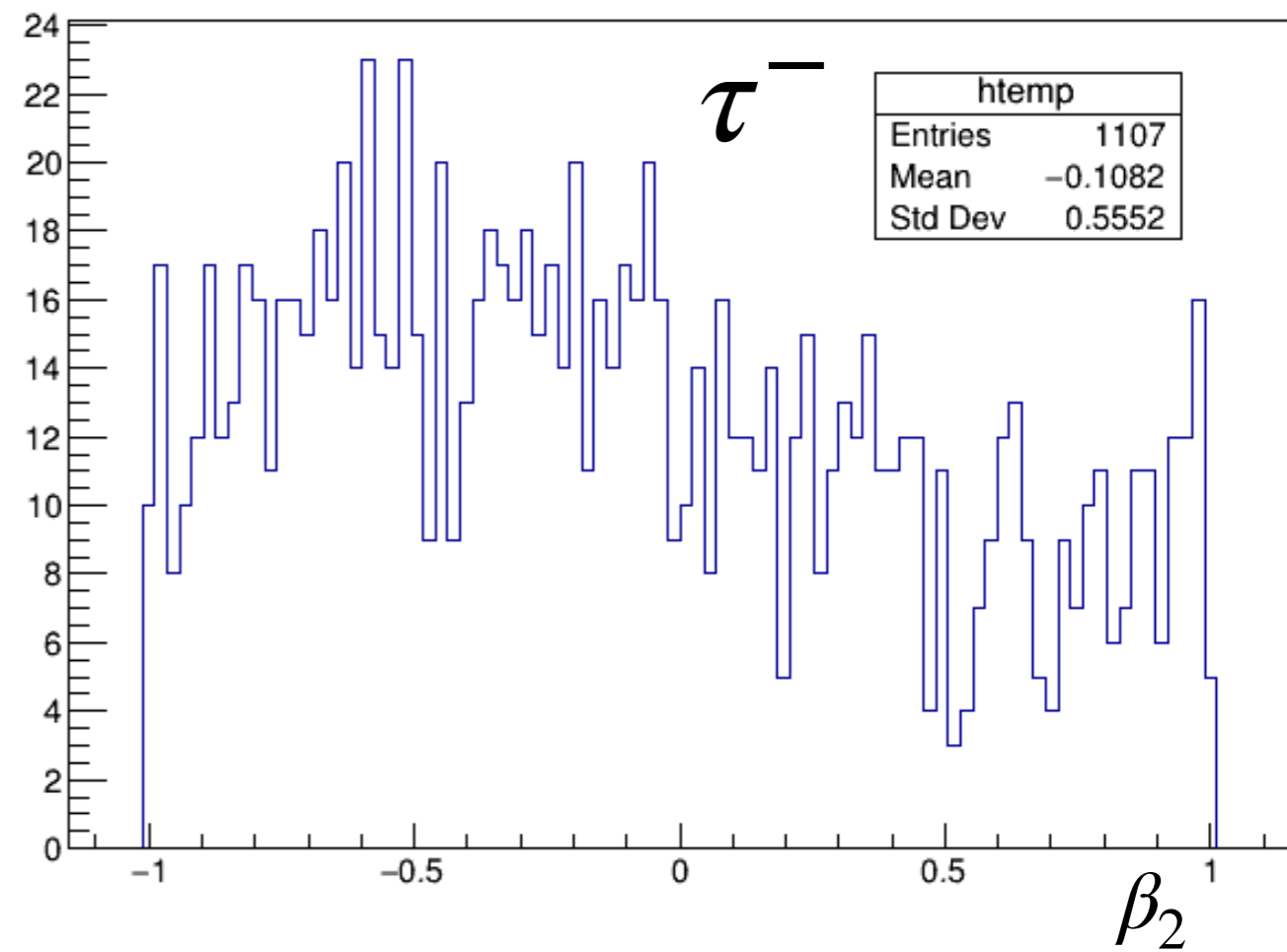
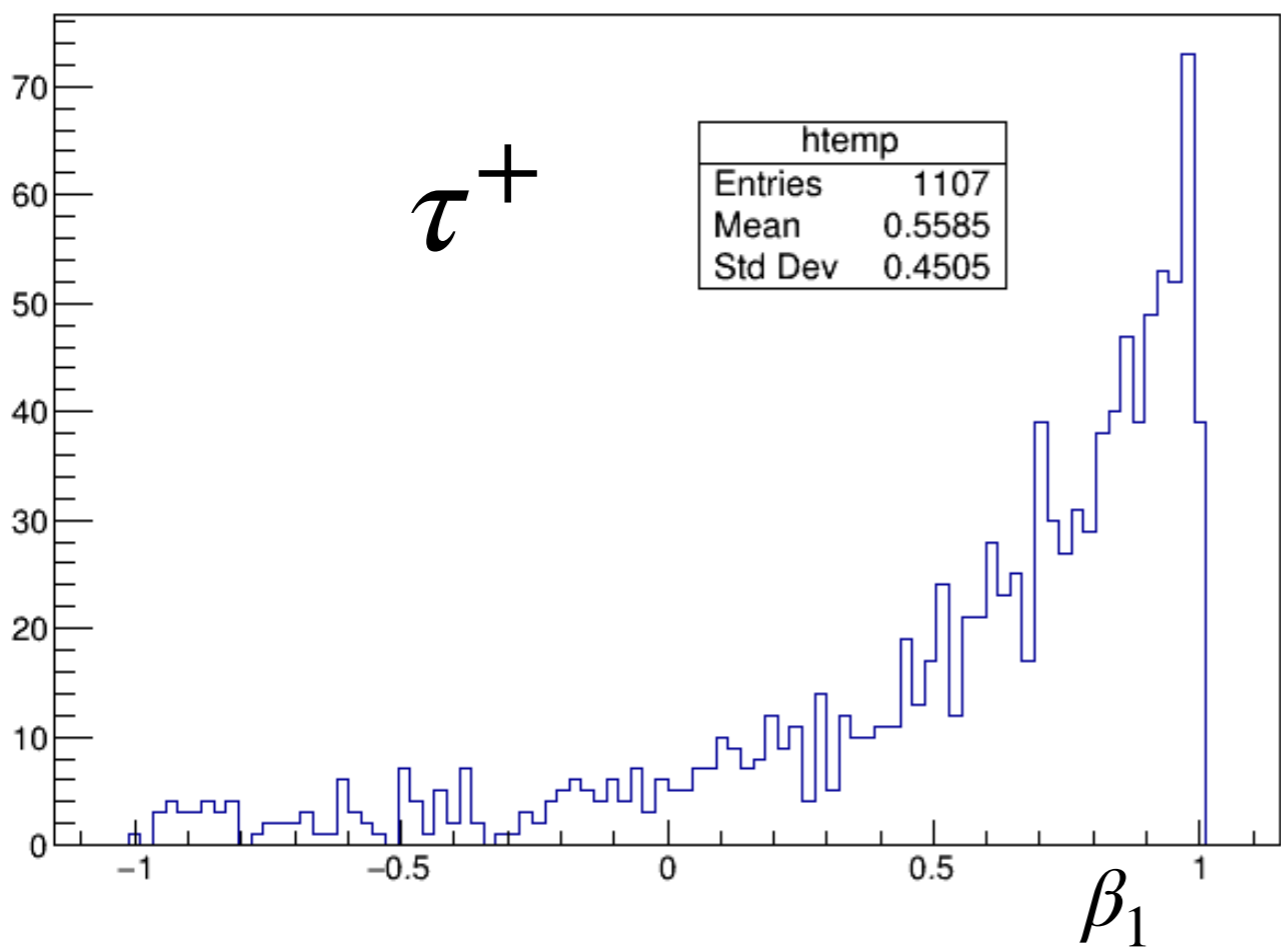
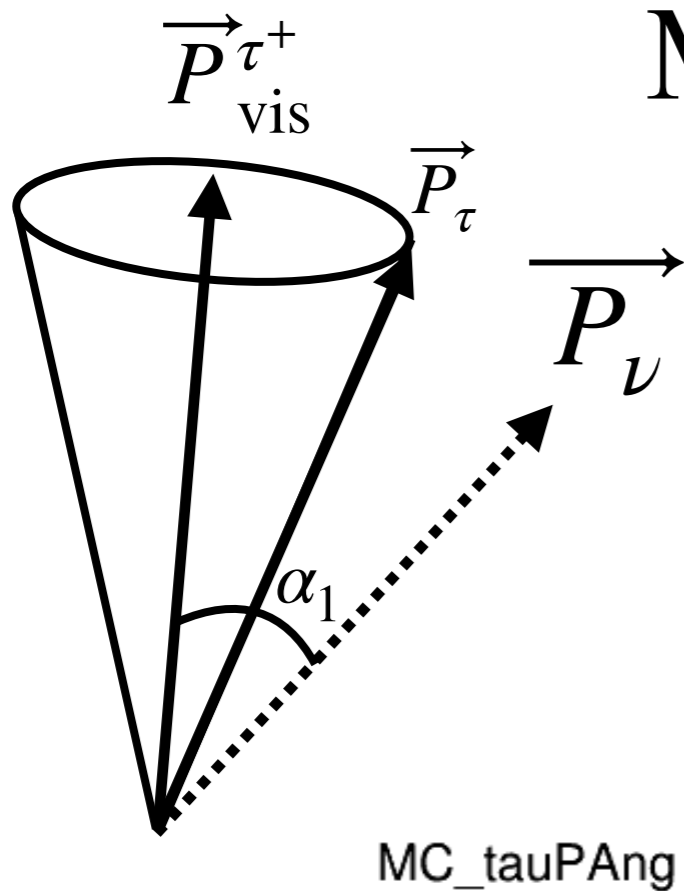


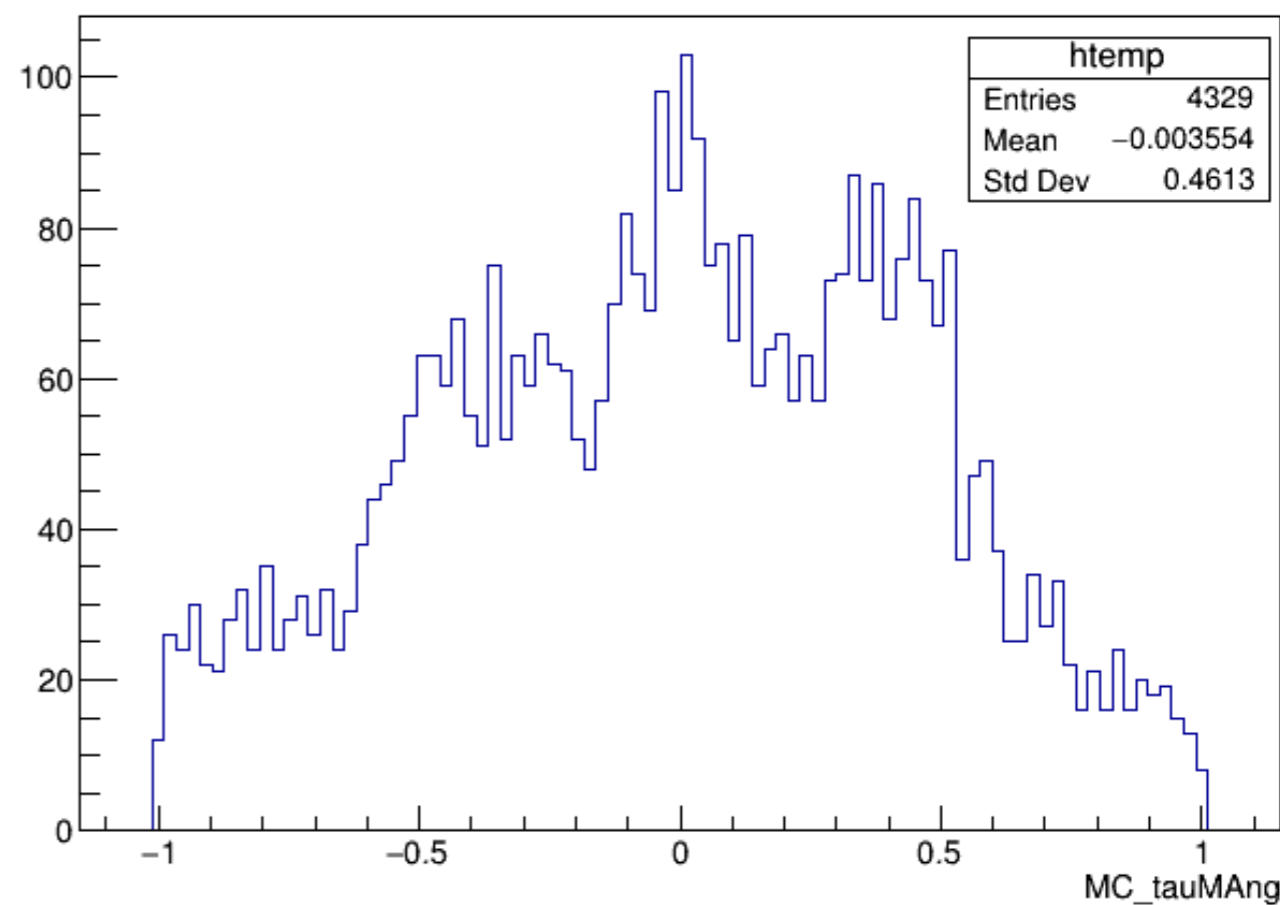
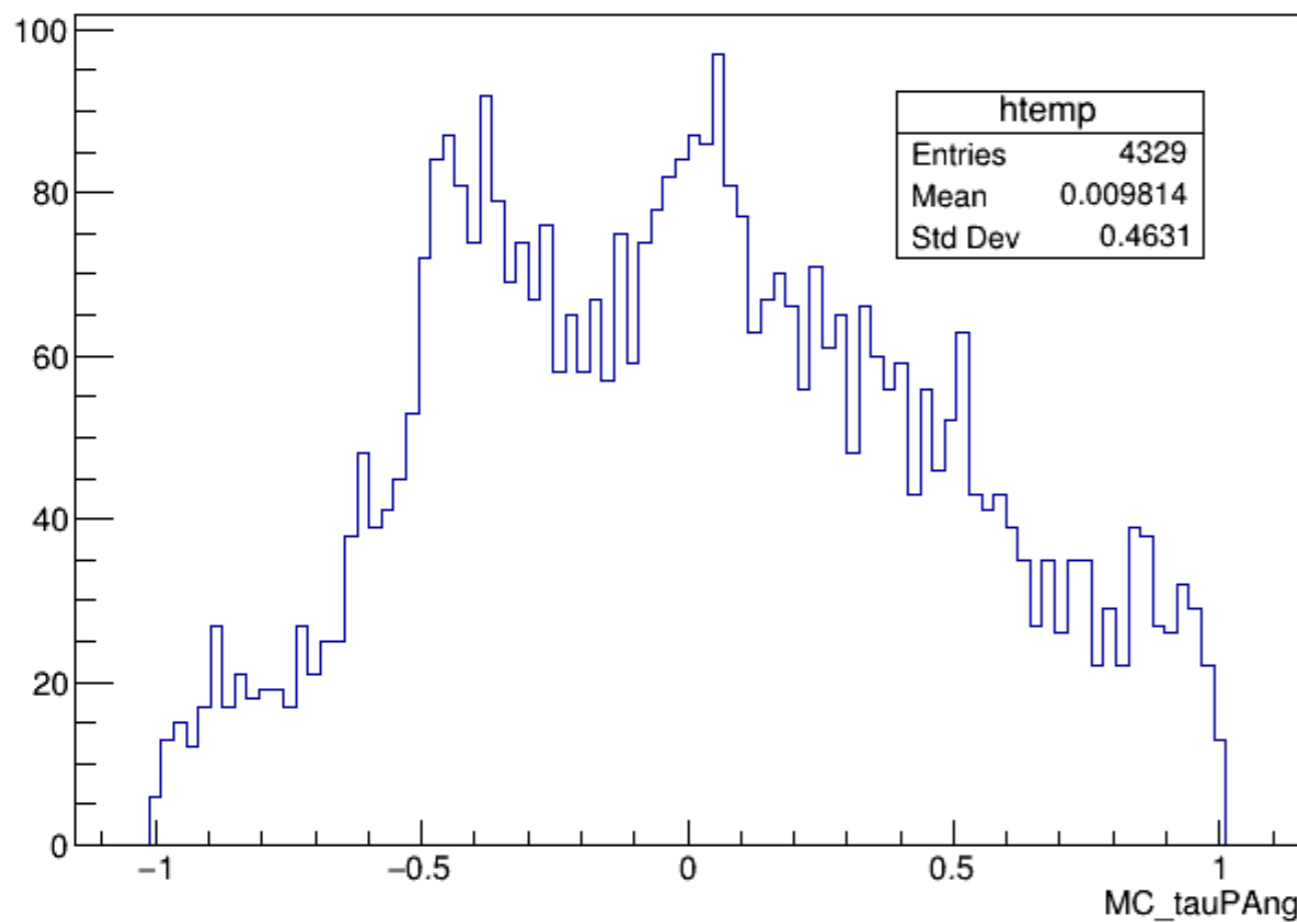
- Prepare for IEEE NSS talk
 - my talk was finished (11/3 midnight...)
- Prepare for SNOWMASS talk
- Tau decay mode selection
 - 1-prong a_1 decay
 - check merged photon
 - no merged photon events were found with 250 GeV
- Neutrino energy calculation
 - ▶ cone method
 - compared with MC angle between tau and tau visible daughters
 - check my code / calculation...



MC $\cos \alpha$ distribution



α : angle between MC $\vec{P}_{\text{vis}}^{\tau^+}$ and \vec{P}_{ν}

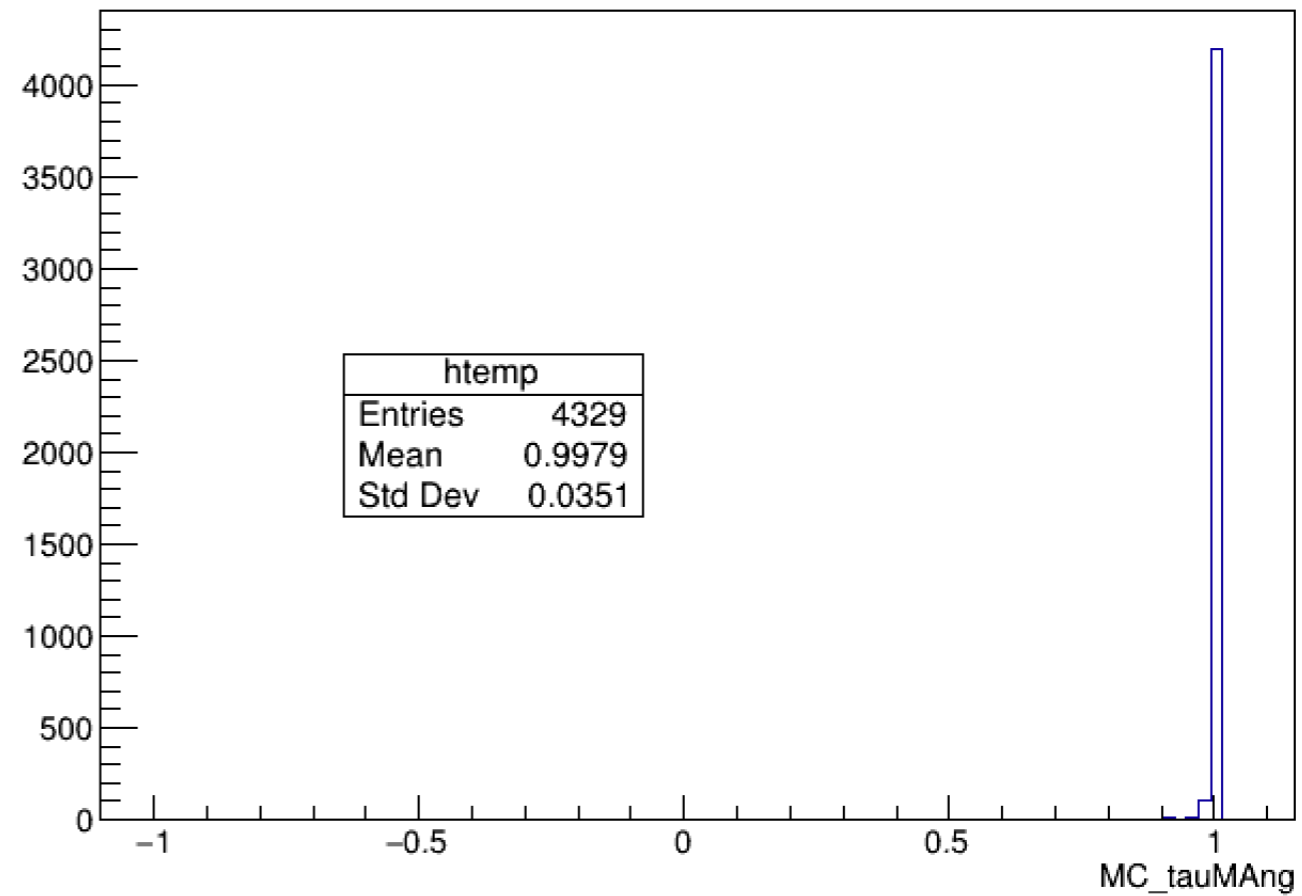
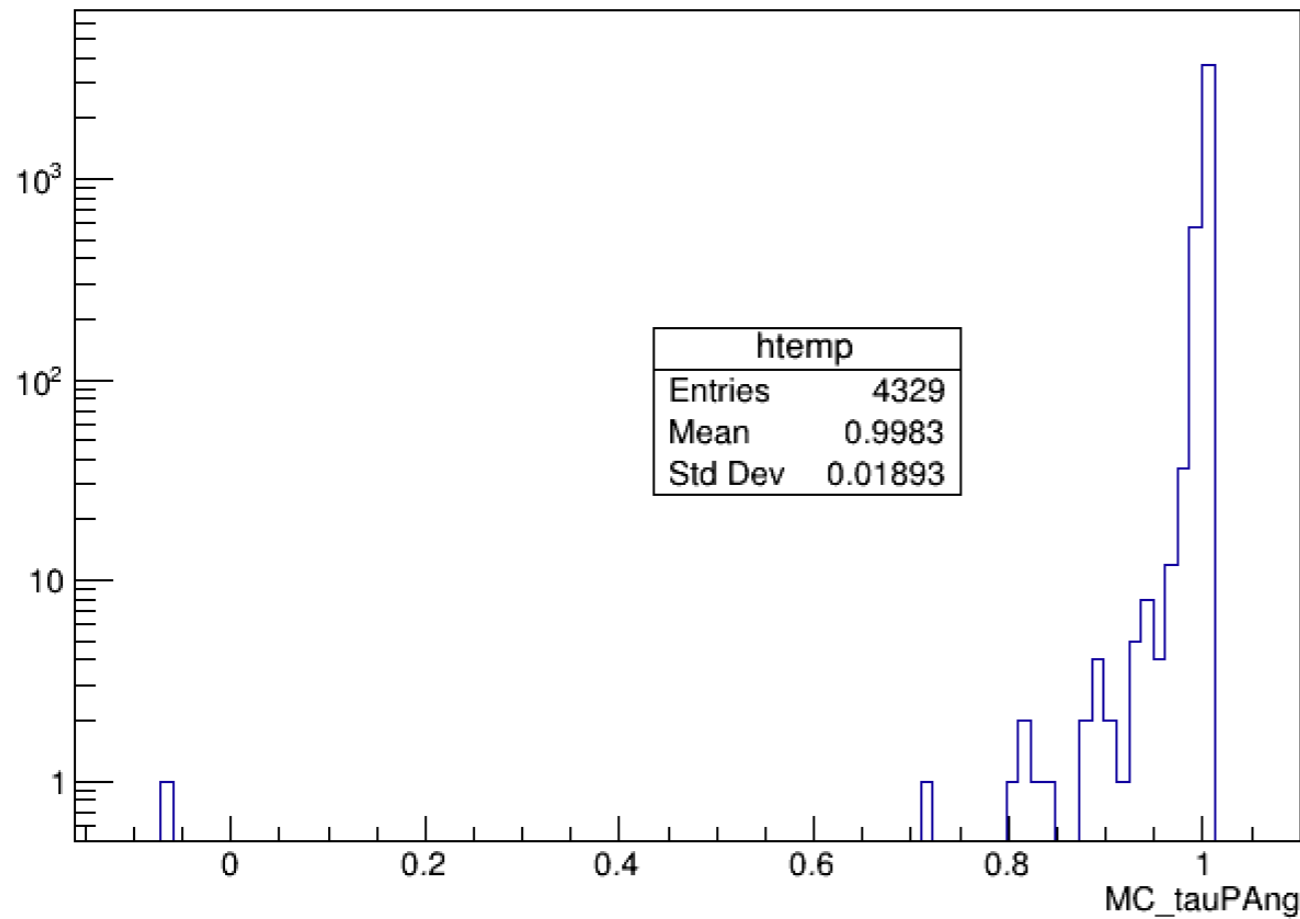


very strange distribution...

`TLorentzVector (Double_t x, Double_t y, Double_t z, Double_t t)`

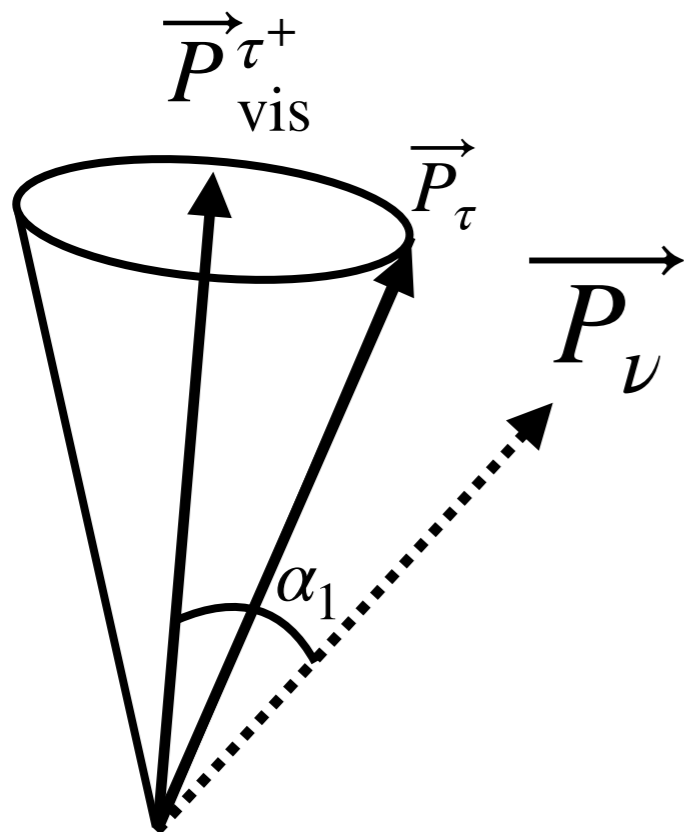
my code (E, px, py, pz)

very stupid mistake



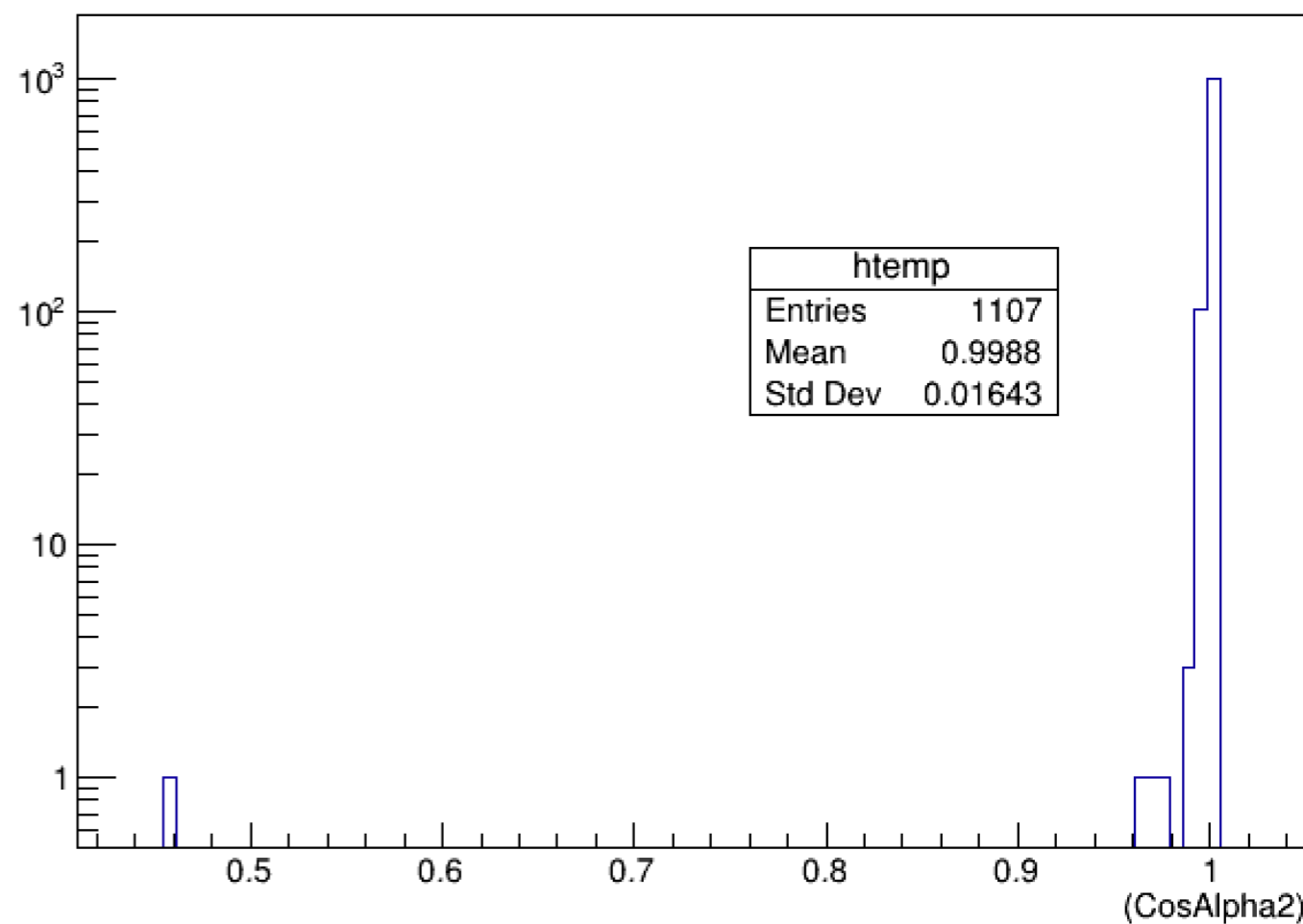
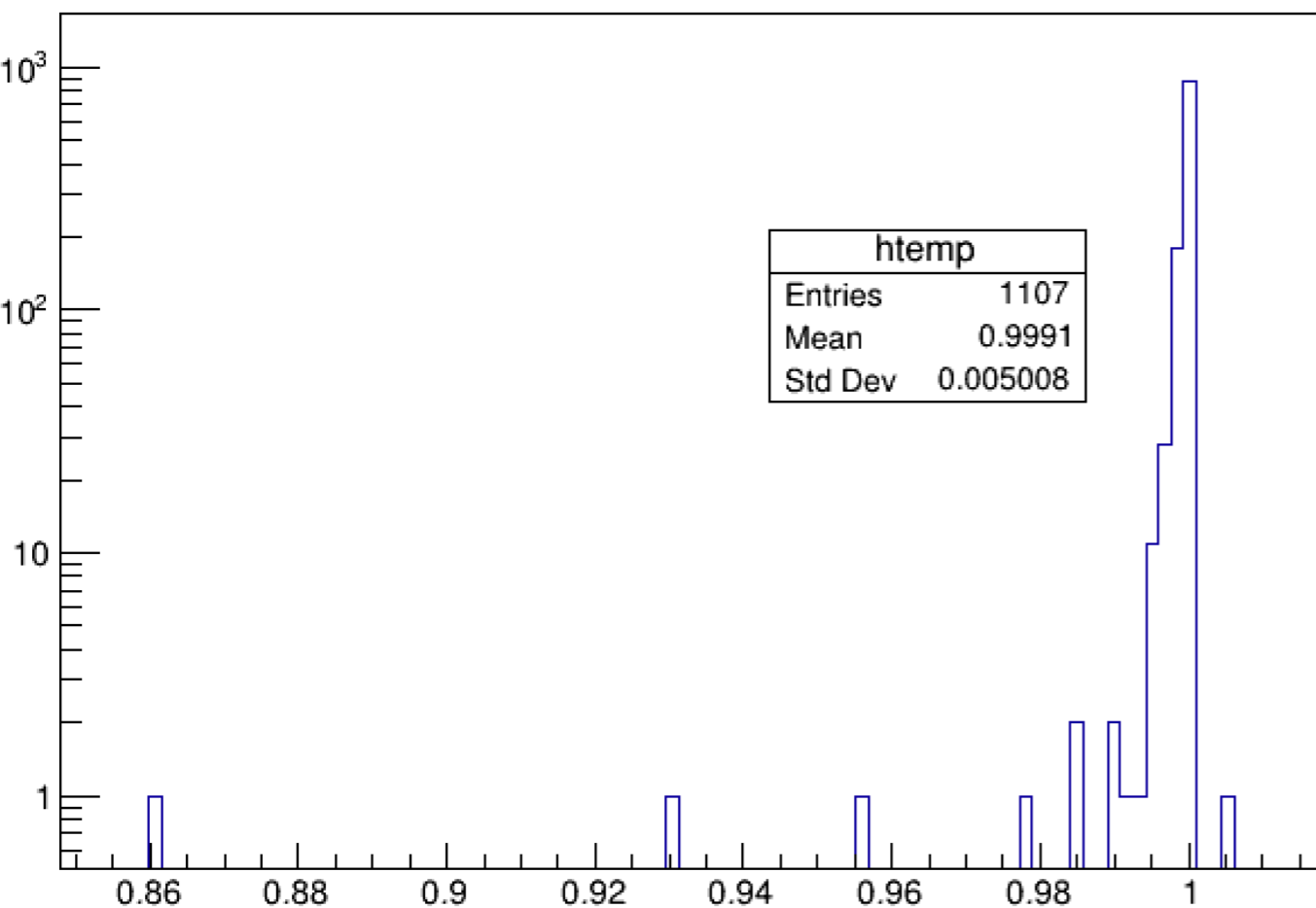
good!!

cos α distribution

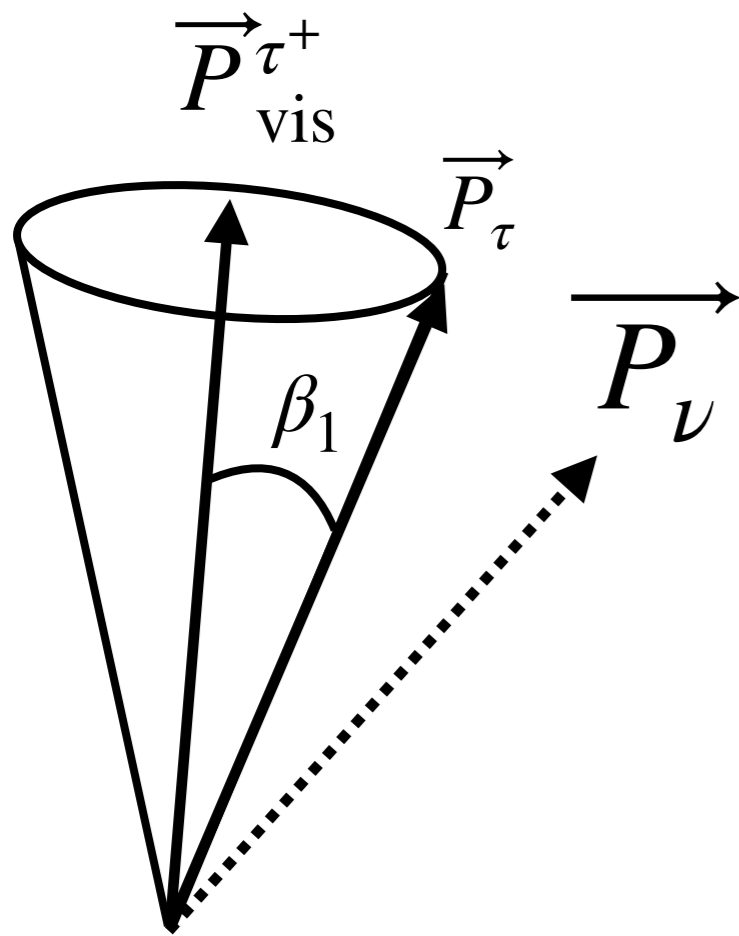


α : angle between $\vec{P}_{\text{vis}}^{\tau^+}$ and \vec{P}_{ν}

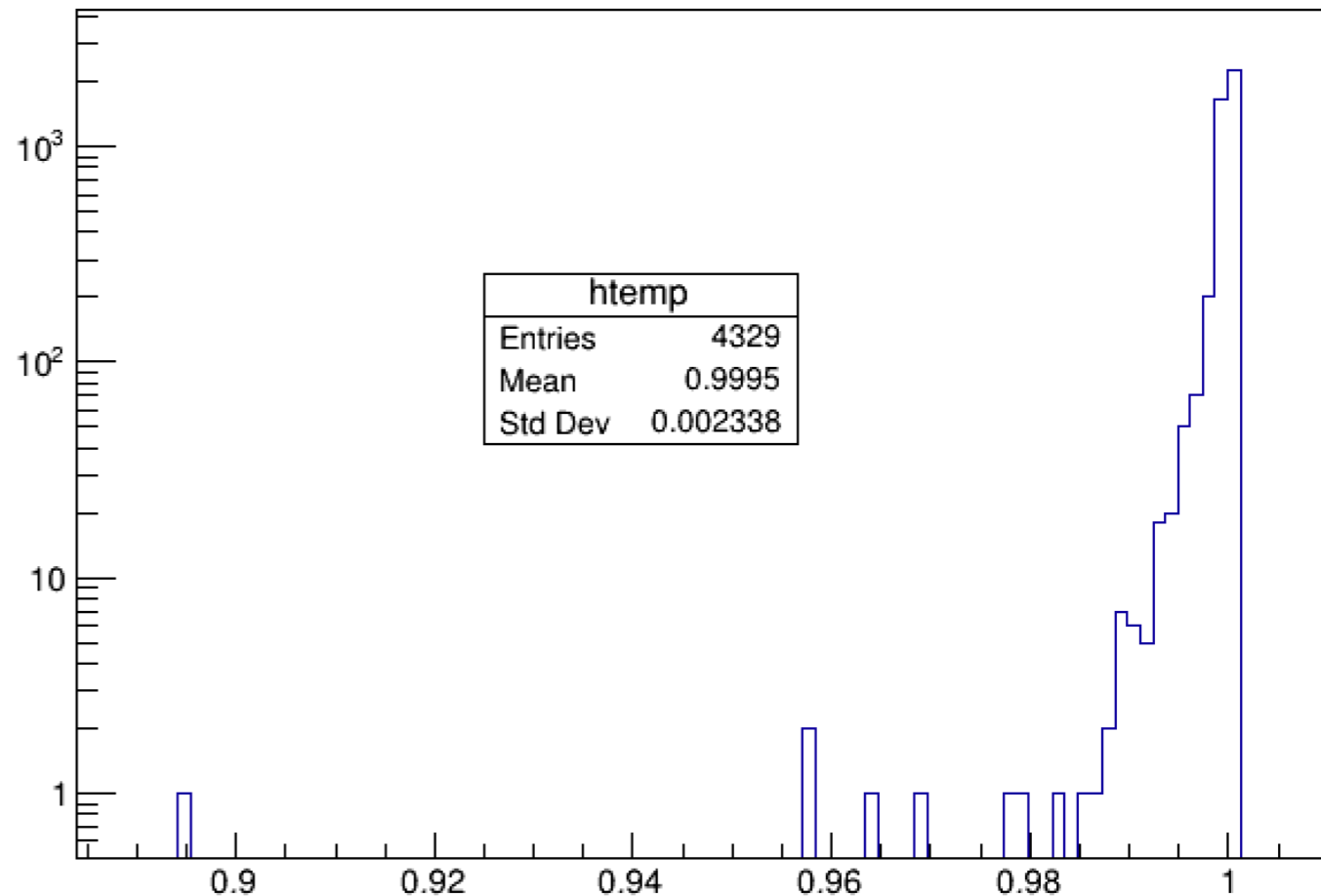
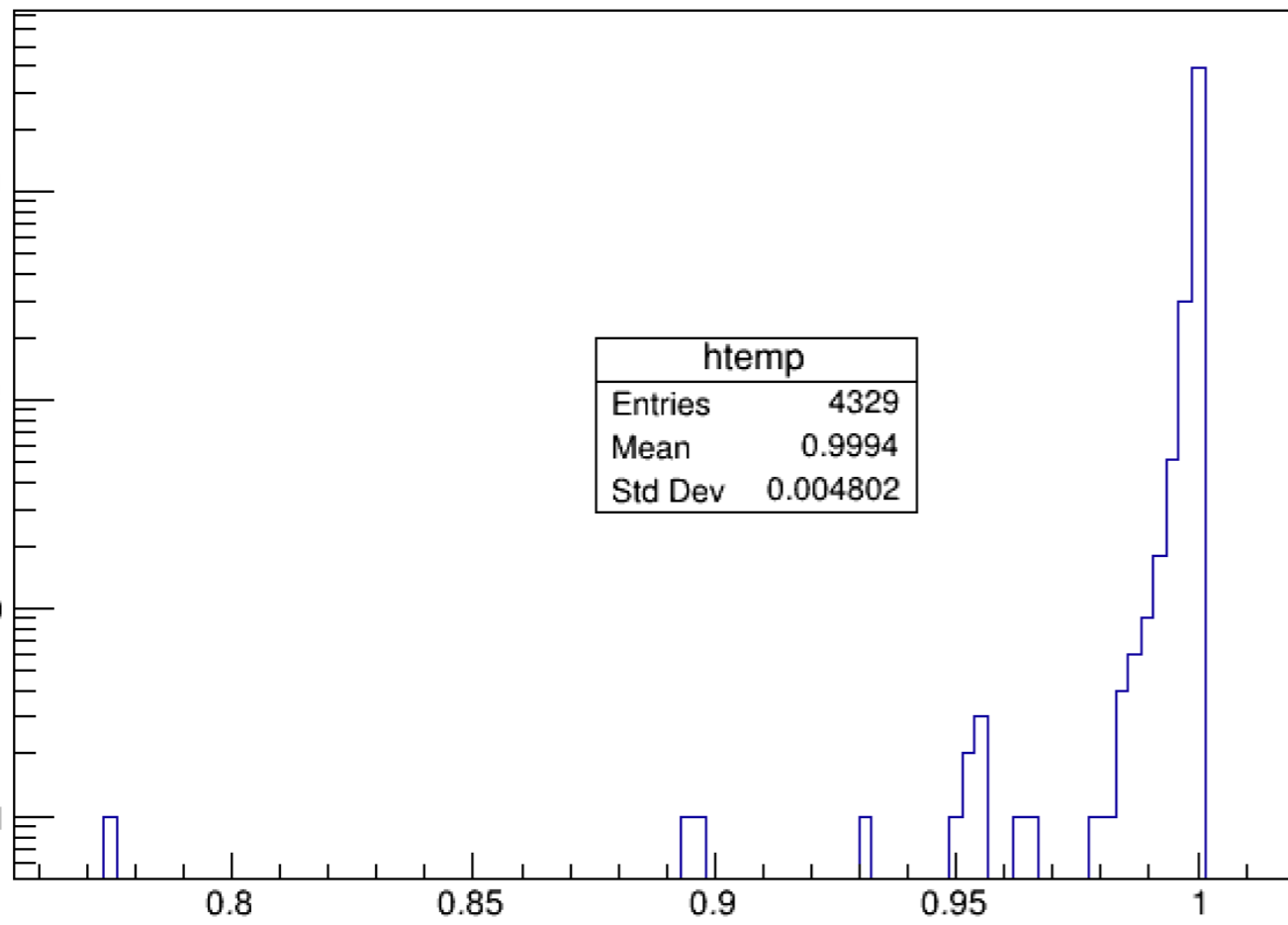
$$m_{\tau\tau} > 240 \text{ GeV}$$



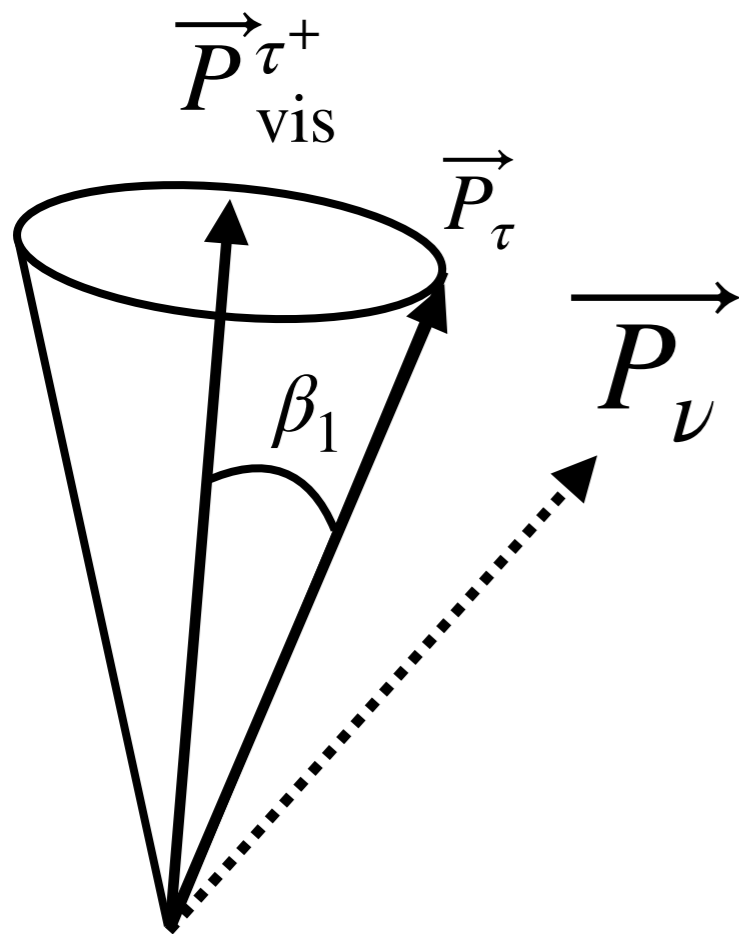
$\cos \beta$ distribution



$\cos \beta$ should be close to 1



$\cos \beta$ distribution



$\cos \beta$ should be close to 1

$$m_{\tau\tau} > 240 \text{ GeV}$$

