

Higgs CP

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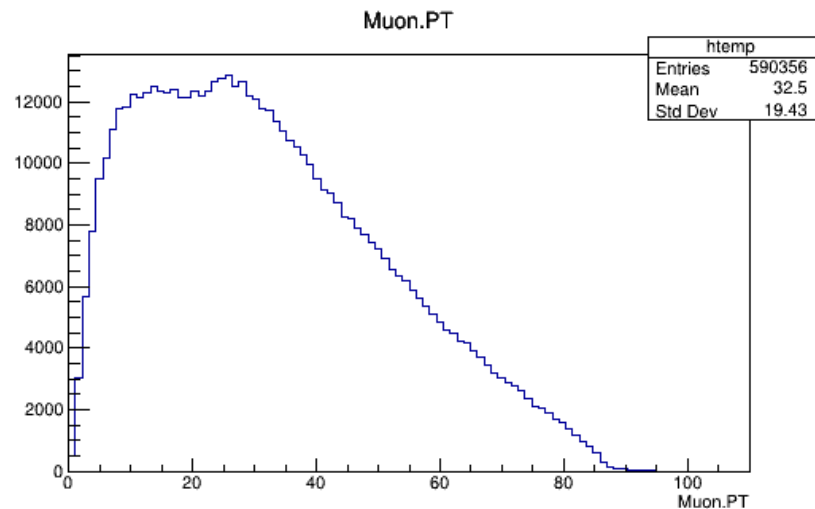
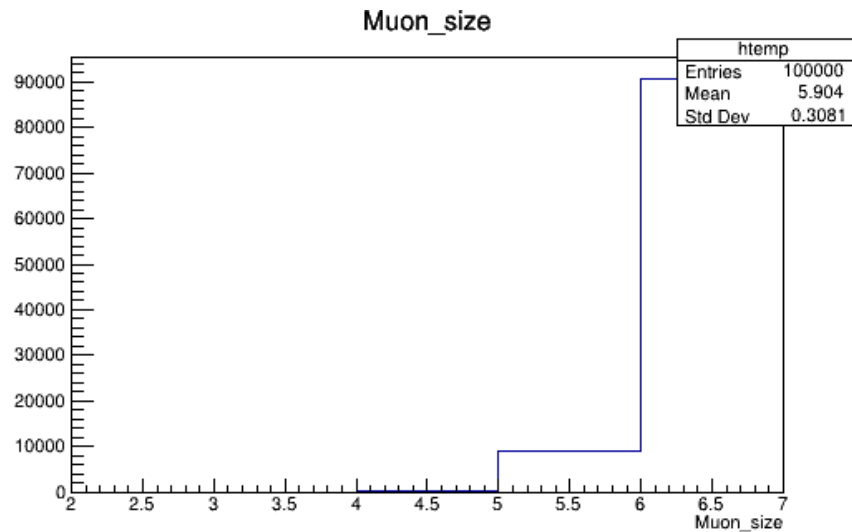
Core software weekly

In DelPhes

> Detector : CEPC

- Magnet field = 3.5 T
- Tracking eff, 100% when $pt > 0.1$ GeV and $\eta < 3$
- Resolution:
 - > $\eta < 1 : \sqrt{0.001^2 + p_T^2 \times 10^{-10}}$
 - > $\eta < 3 : \sqrt{0.01^2 + p_T^2 \times 10^{-8}}$

Delphes output spectrums



ZH->ZZZ selections

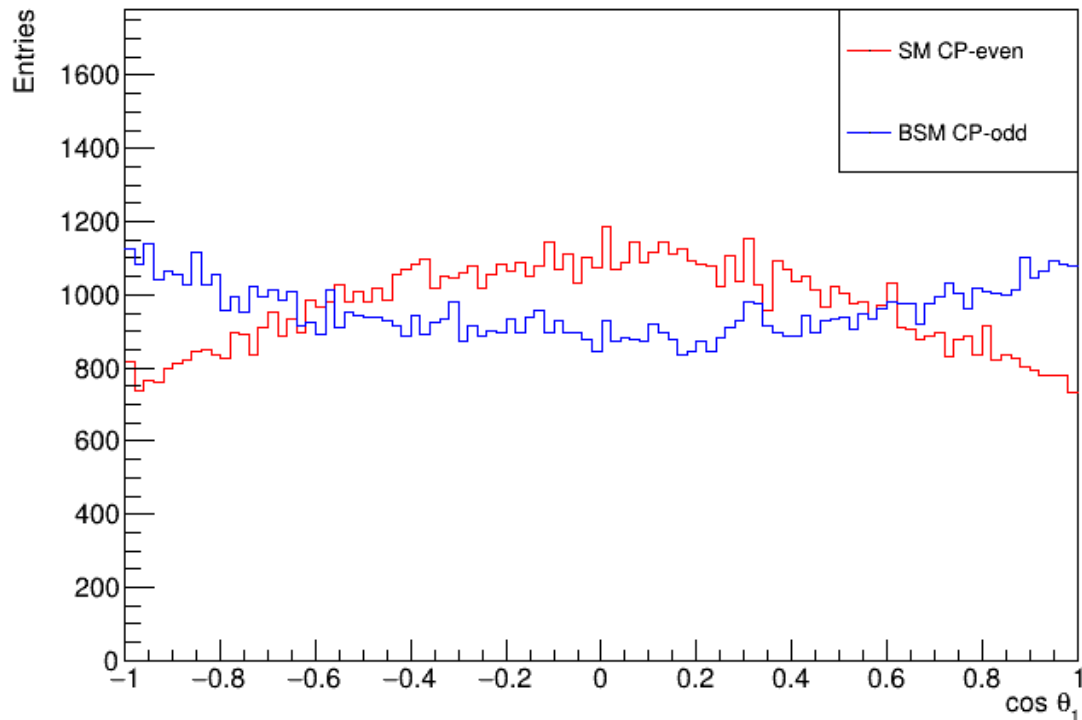
> **At least 5 muon**

- Missing muon momentum = cms - p4(5 muons)

> **Loop all the combinations and choose the candidate with least**

- $(M(\mu^+ \mu^-) - M_Z)^2 + (M(\mu^+ \mu^-)_2 - M_Z)^2 + (M(ZZ^*) - M_H)^2$

Convert to helicity angles



Next todo:
Help Mengyao to do the training