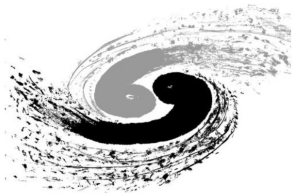
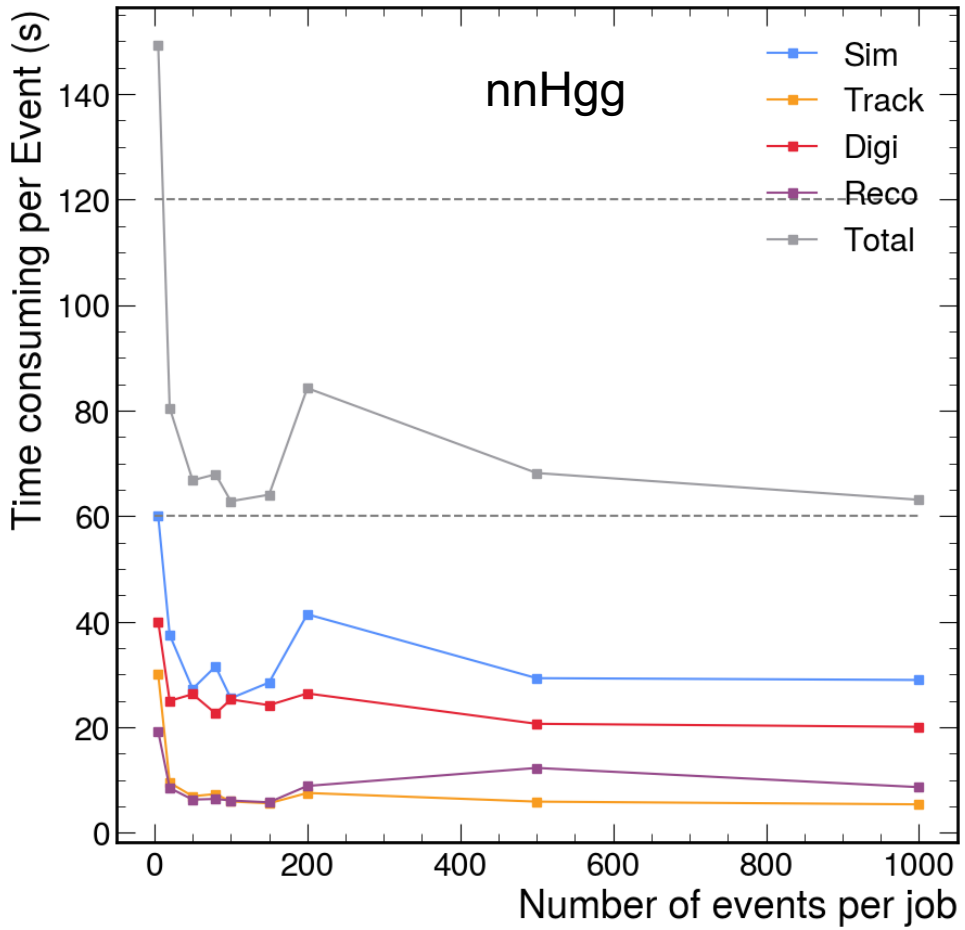
# CEPC Update

Zebing Wang



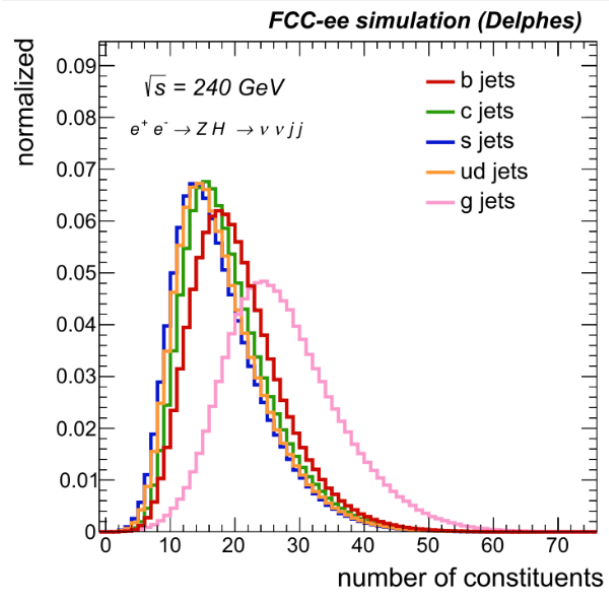
# Full Sim Time Consuming

**CEPCSW: TDR24.9.1**




- **100 events** per job has the smallest time consuming per event ~1 mins per Event
  - Memery request: 4000 megabytes
  - Similar speed for the rest of channels

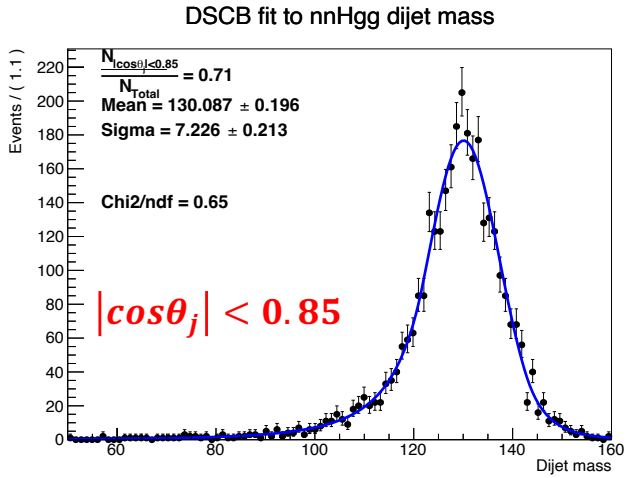
- **1.4 M events** (from Kaili's slides)
  - 1000cpu ~1400 mins ~**1day**

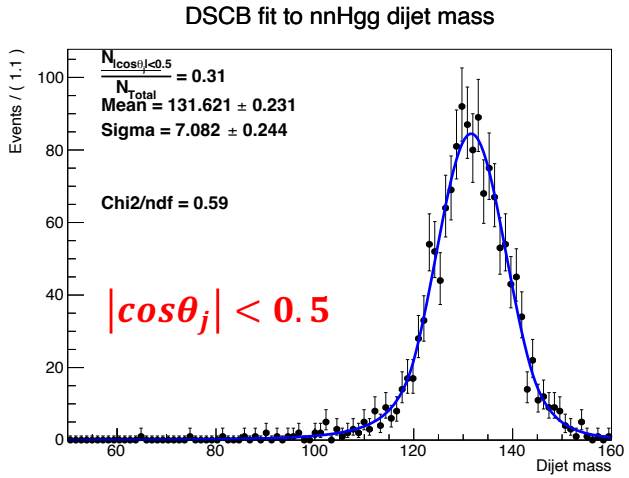



(a)

# nnHgg Reconstruction

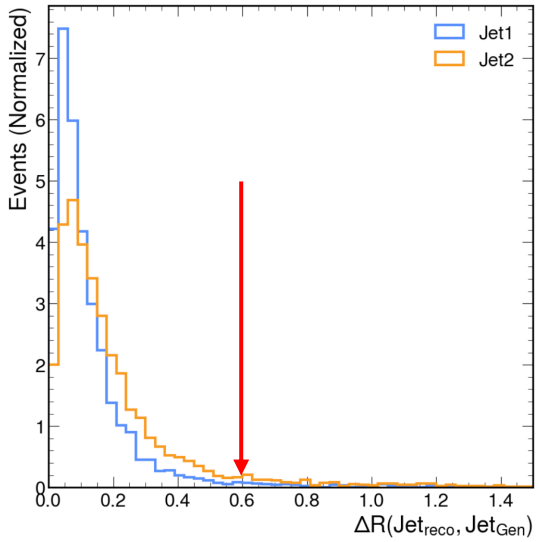
**CEPCSW: TDR24.9.1**



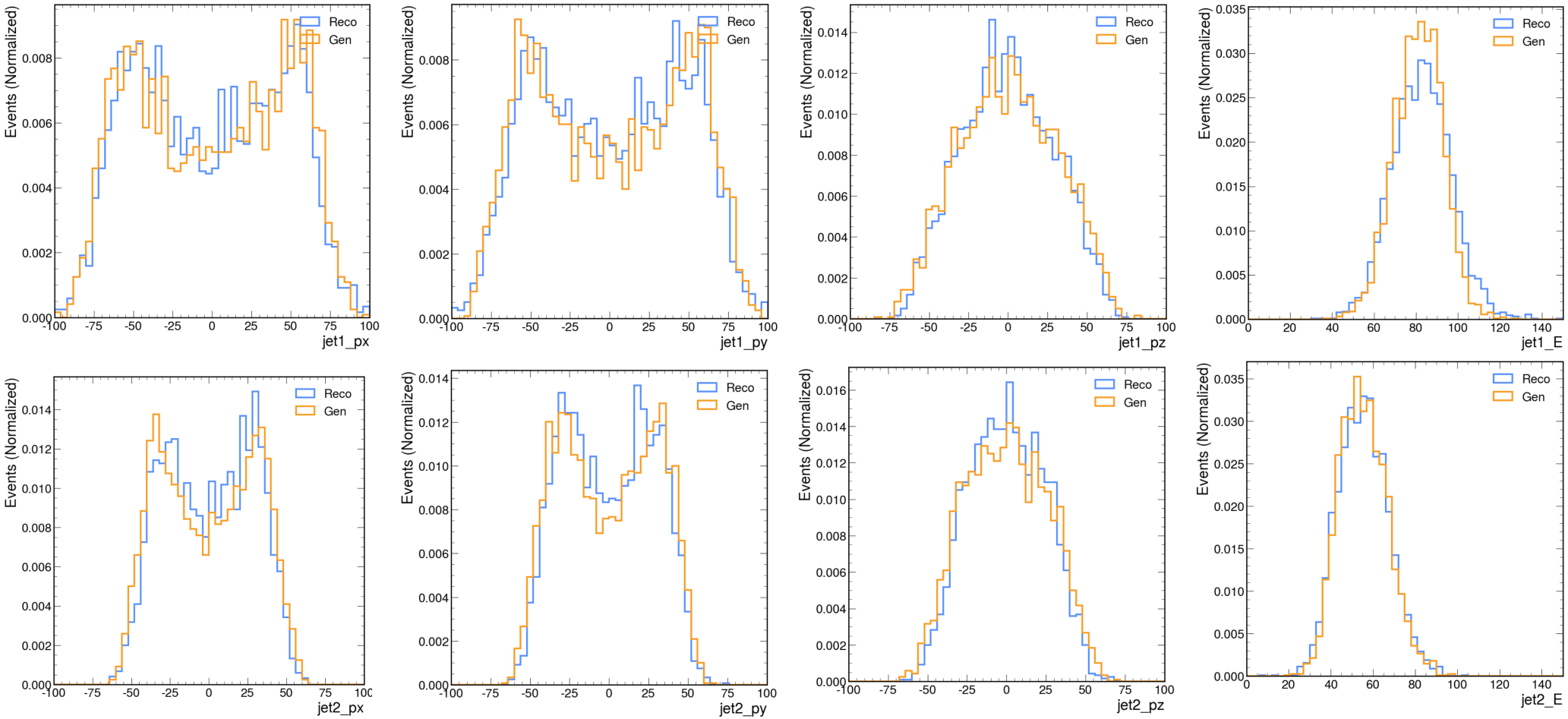

- ee_kt algorithm for the jet reconstruction
  - Reconstruction level PFO (Reco)
  - Generator level particles (Gen)
- Selection
  - **Two jets $|cos\theta| < 0.85$**
- Resolution: ~5.5%
- Gen match looks good

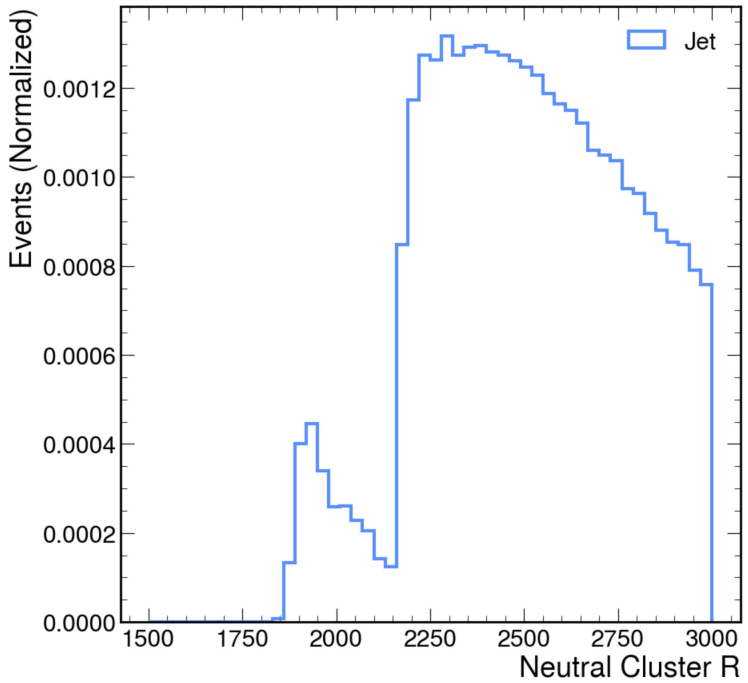
| Selection Eff | Efficiency |
|---|---|
| $\|cos\theta_j\| < 0.85$ | 0.71 |
| $\Delta R < 0.6$ | 0.65 |

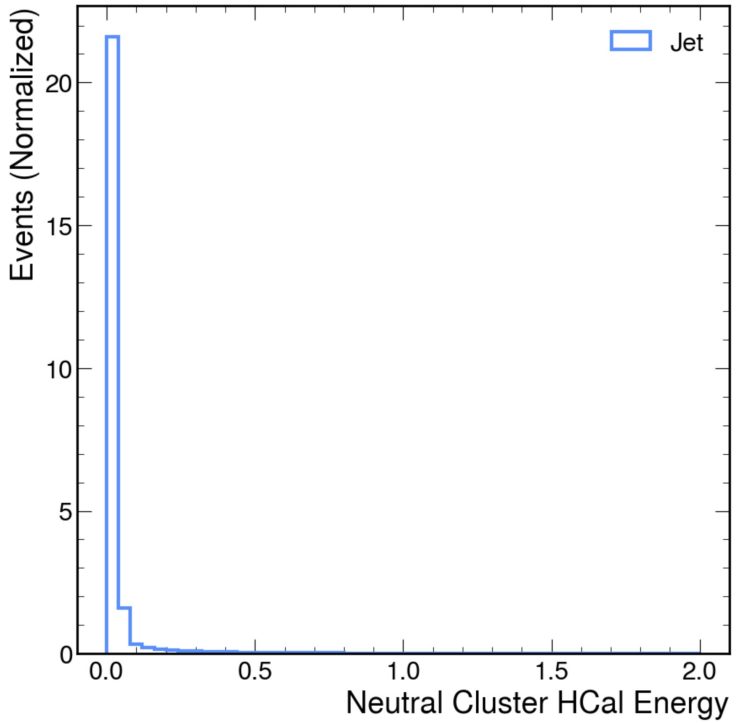


# Matched Jets Distribution

- **No pxpypz sign flip** for the negative charged PFO
- Worse reco distributions once apply the pxpypz sign flip for the negative charged PFO




Jet
Events (Normalized)
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
1500
1750
2000
2250
2500
2750
3000
Neutral Cluster R


Jet
Events (Normalized)
20
15
10
5
0
0.0
0.5
1.0
1.5
2.0
Neutral Cluster HCal Energy

# 谢谢