CEPC Jet&Clusters

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CEPWSW latest

- Latest Release 25.1.2
  - Calo 15mm release in https://code.ihep.ac.cn/guofangyi/cepcsw-release/-/tree/calorec_Ecal15mm?ref_type=heads, under testing.
- Memory usage:
  - sim, digi, trk ~6GB. rec: 8GB.
  - New samples are generated in different step to reduce memory usage.

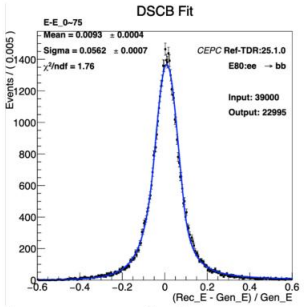
- Path:
  - /cefs/higgs/zhangkl/Production/2501
  - /cefs/higgs/zhangkl/Production/2501/eeqq

  - Current cefs OK. (I take ~500T of them)

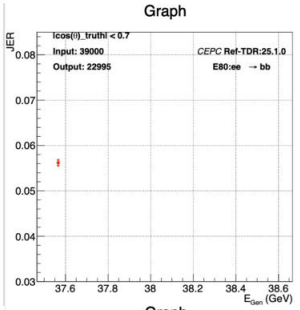
Jet Performance before New Year

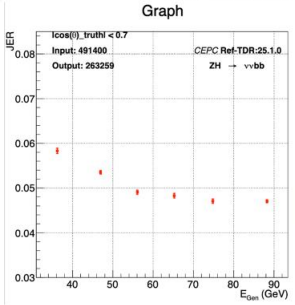
@Yingqi, Xiaotian

JER/JES on ee->bb, 80GeV

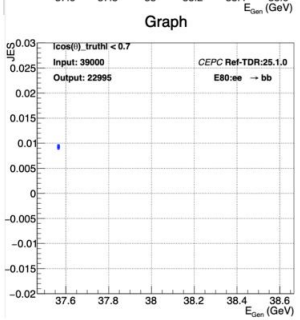


JER~5.6%





H->bb, 40GeV ~5.6%.



Case	process	$ZH \to \nu\nu gg$	$ZH \to \nu\nu bb$	$ZH \to \nu\nu cc$	$ZH \to \nu\nu uu$	$ZH \to \nu\nu dd$	$ZH \to \nu\nu ss$
Physical level	BMR/%	4.00 ± 0.01	4.36 ± 0.03	4.15 ± 0.02	3.80 ± 0.01	3.97 ± 0.01	4.44 ± 0.01
	Efficiency/%	73.3	73.7	74.0	74.1	74.1	74.1

Contents in TDR

- Jet Performance
- Jet Analysis
- Samples

书签

Tech issues

- Endcap, overlap region check (by mono photon scan?)
- Jet Origin ID eff(~0.5 currently, overfit?)
- Electron Reco multi count(See Geliang’s report)

New tutorial based in 25.1

- https://code.ihep.ac.cn/zhangkl/cepcsw_tutorial
- For CEPCSW env, sample, analysis
- Please share to new comers.