CEPC Analysis Tutorial (Part2)

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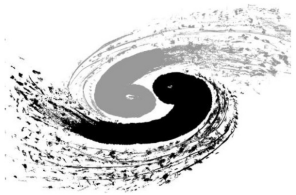
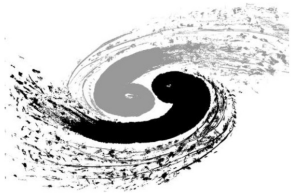


Analysis codes



- Analysis codes: /publicfs/cms/user/wangzebing/CEPC/CEPCSW_tdr24.9.1/CEPCSW/Analysis/GenMatch
- Input dataset: /publicfs/cms/user/wangzebing/CEPC/CEPCSW_tdr24.9.1/CEPCSW/FullSim_samples/Rec_TDR_o1_v01_E240_nnh_gg.root

  - Configuration file: jcls_genmatch.py
  - Source file: src/GenMatch.cpp
  - Output file: single tree root file that analyzable

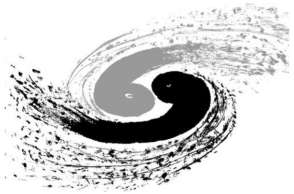
  - Copy the codes into your CEPCSW working area
  - Compile the CEPCSW

  - ./run.sh jcls_genmatch.py

```
from Configurables import GenMatch
genmatch = GenMatch("GenMatch")
genmatch.nJets = 2
genmatch.R = 0.6
genmatch.OutputFile = "./RecJets_TDR_o1_v01_E240_nnh_gg.root"
```

```
from Configurables import ApplicationMgr
ApplicationMgr(
    TopAlg=[inp, genmatch ],
    EvtSel="NONE",
    EvtMax=3,
    ExtSvc=[podioevent],
    #OutputLevel=DEBUG
)
```

Source File



- GenMatch.cpp
  - L 166-178: get GEN particle collection
  - L 192: get all the reco particles for the reco jet reconstruction
  - L 200-325: separate reco PFO into muons/charged particles/neutral particles
  - L 336-344: ee_kt_algorithm for reco jet reconstruction
  - L 411-466: GEN particle classification
  - L 481-489: ee_kt_algorithm for GEN jet reconstruction
  - L 500-525: Jet GEN match

谢谢