

CEPC Sample Validation

Group Meeting
30 Nov 2018

- Detector version, software version, ...
- The samples need an automatic validation chain
- Single particle
 - energy deposition
 - clustering
 - eff
 - separation
 - id
 - photon
 - charged
- Physics event
 - lepton id
 - BMR

Single particle Samples

- Photon:
 - energy: 1-50 GeV
 - distance: 1-50 mm
- Neutron
 - energy: 1-50 GeV
- KaonL: 10GeV
- $(e^-, \mu^-, \pi^+)^*(1-70\text{GeV})$

Single particle plots

- Energy:
 - single photon energy linearity
 - single kaon energy in ecal vs hcal
- Clustering
 - single photon cluster efficiency
 - di-photon separation performance
- id
 - photon id efficiency & neutron mis-id rate
 - lepton id efficiency

Events

sample, number & plots

- $mumuH$, eeH
 - di-mu efficiency
 - di-e efficiency
- $nnHbb$
 - mu id efficiency in jets
- $nnHgg$
 - BMR plot