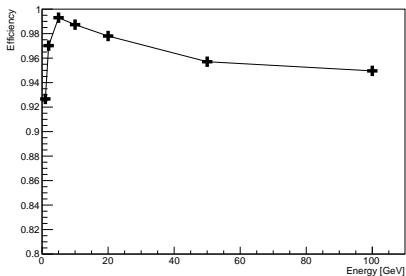
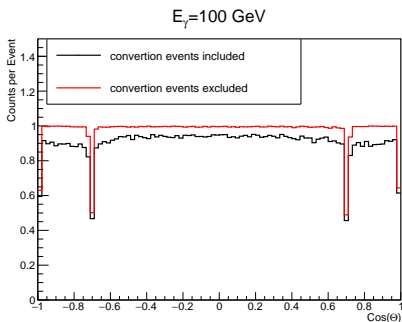
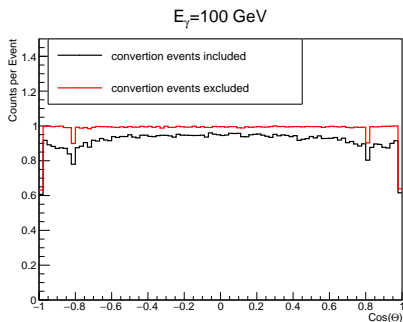


- Samples: photon gun with isotrop $\cos(\theta)$ and ϕ distribution: 1, 2, 5, 10, 20, 50, 100 GeV
- Efficiency definition:
 - correct reconstruction PFO type (pick most energetic PFO of correct type)
 - energy matching: $|E_{MC} - E_{PFO}| < 200\% \times \sqrt{E_{MC}} + 0.5\text{GeV}$



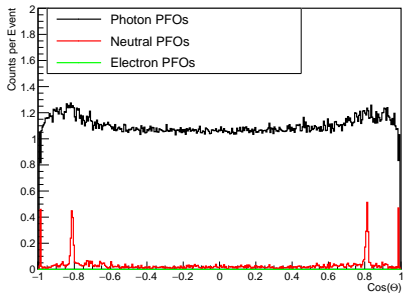
Energy [GeV]	N_{total}	fail energy matching	fail type reconstruction
100	87249	3964	434
50	91116	3462	450
20	91121	1569	431
10	96993	652	576
5	99003	0	692
2	89121	0	2656
1	99027	0	7260



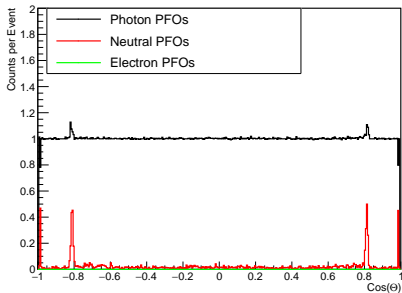
- Left: CLIC, Right: FCCee
- Inefficiency come from events with conversion
- energy matching requirement: $|E_{MC} - E_{PFO}| < 5 * 0.15 \times \sqrt{E_{MC}}$

Number of PFOs per event top: CLIC, bottom: FCCee

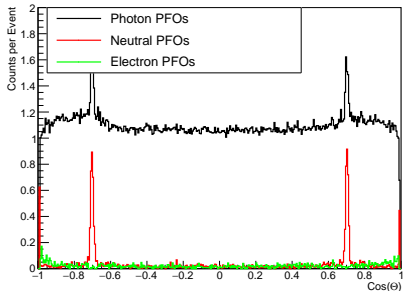
$E_\gamma=100$ GeV



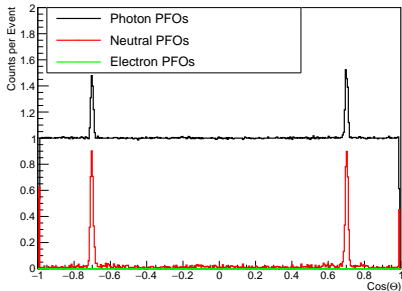
$E_\gamma=100$ GeV

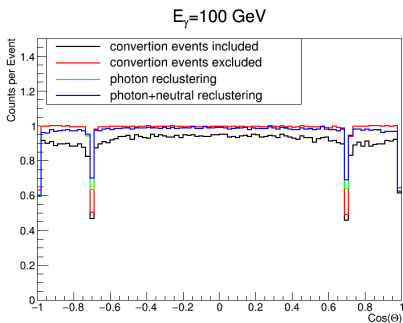
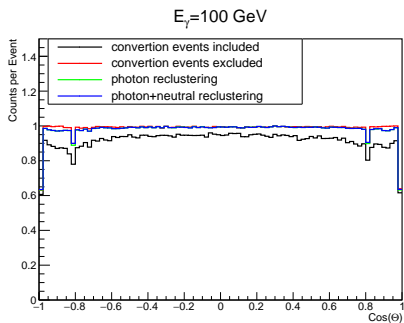


$E_\gamma=100$ GeV



$E_\gamma=100$ GeV





- Left: CLIC, Right: FCCee
- Reclustering procedure: $|\Delta\theta| < 0.6^\circ$, $|\Delta\phi| < 10.0^\circ$

- FCC-ee machine energy regimes: Z, WW, HZ, tt (91.2 - 365 GeV)
- Detector design for FCC-ee is based on the CLIC detector

Overall dimensions of CLIC and FCC-ee detectors

	CLIC		FCC-ee
VTX Barrel	31-60 mm	⇒	17-59 mm
Tracker radius	1486 mm	⇒	2100 mm
ECAL thickness	40 layers, $22 X_0$	⇒	40 layers, $22 X_0$
HCAL thickness	60 layers, $7.5 \lambda_I$	⇒	44 layers, $5.5 \lambda_I$
Solenoid field	4 Tesla	⇒	2 Tesla

- Standard calorimeter calibration with 10 GeV photons, 10 GeV muons and 50 GeV K0L, no software compensation
- Photon reconstruction training with Zuds 380 GeV sample