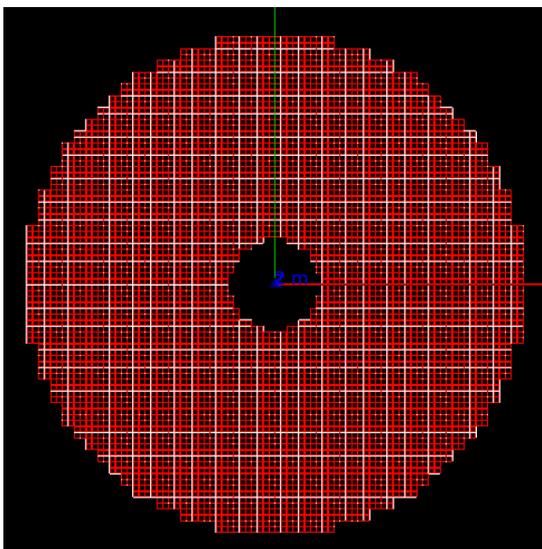
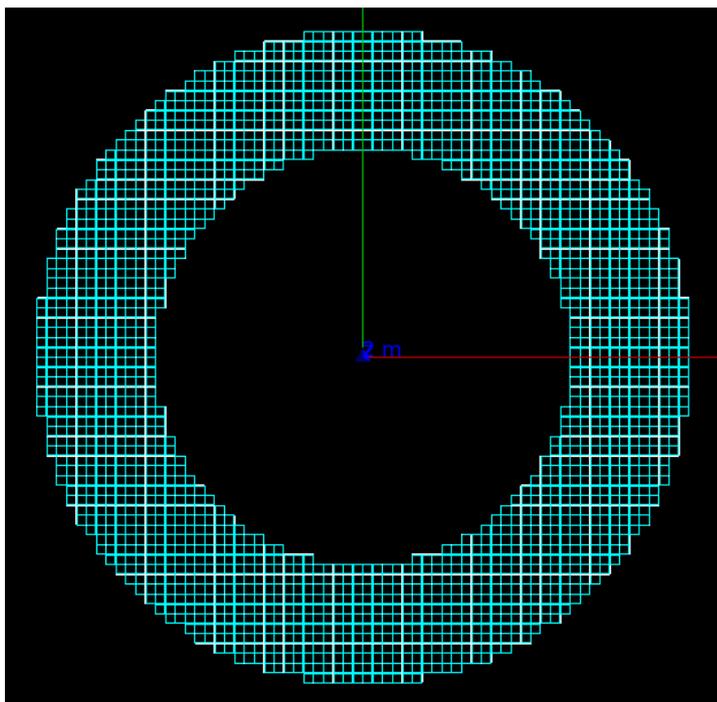




Electron End Cap EMCalorimeter progress

Carlos Munoz Camacho Wang, Pu-Kai 08/06/2021

EEMC configuration

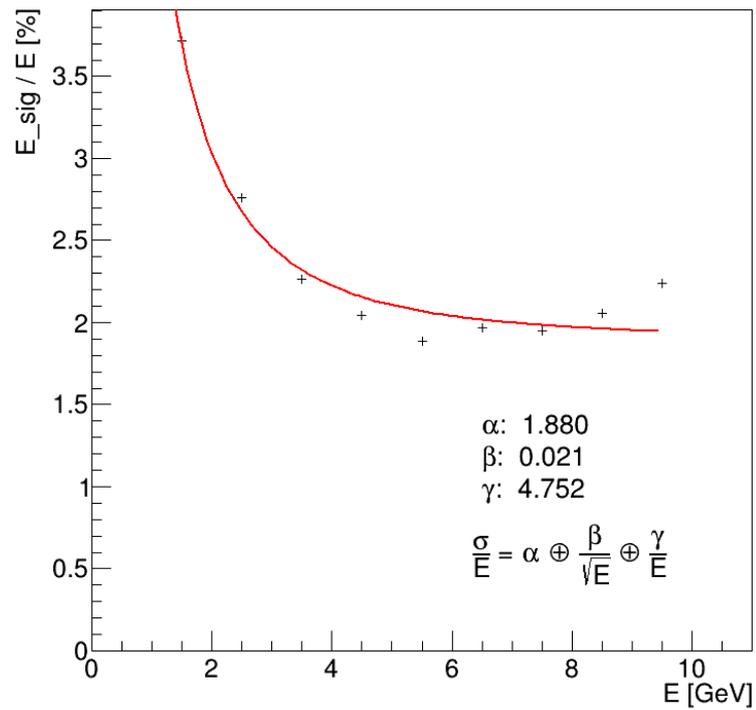


	Inner	Outer
Scin material	lead tungsten	sci glass
Dimension[cm]	1.8 x 1.8 x 20	3.8 x 3.8 x 40
pe per GeV	15000	5000
tower shell[cm]	0.1	0.1
Inner R [cm]	15	84
Outer R [cm]	84	130
eta range	-3.46 ~ -1.77	-1.77 ~ -1.37
N tower	5392	2040

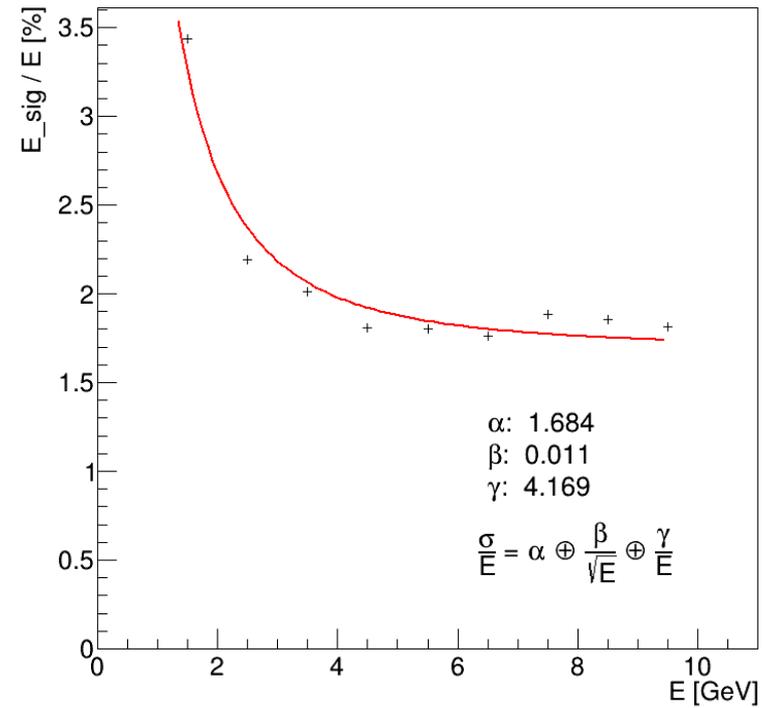
Energy resolution

- 1 ~ 10 GeV g hit EEMC.

E resolution crystal

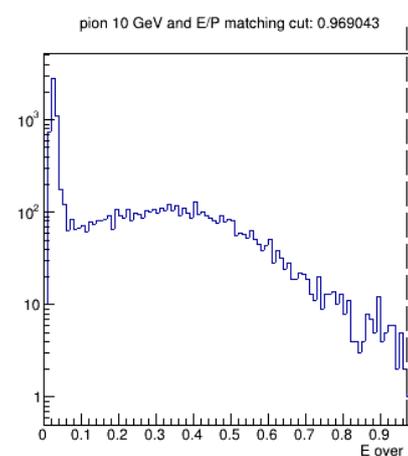
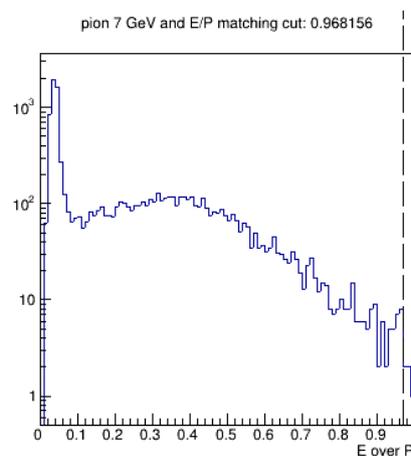
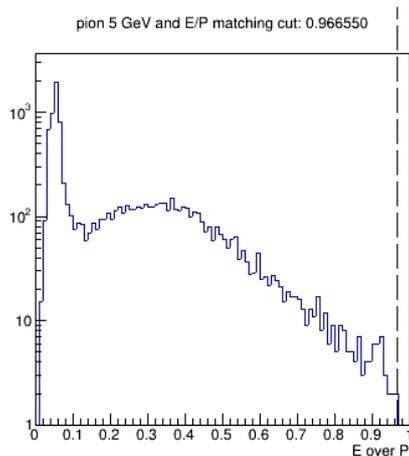
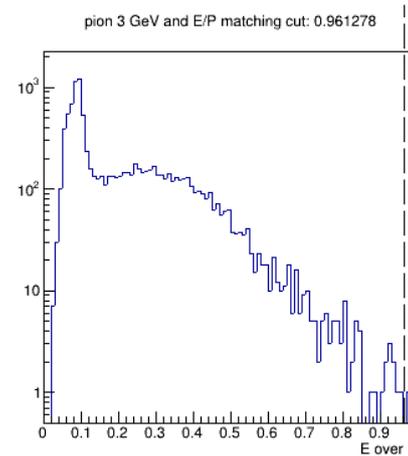
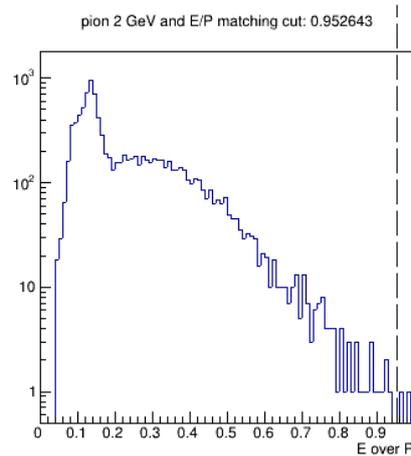
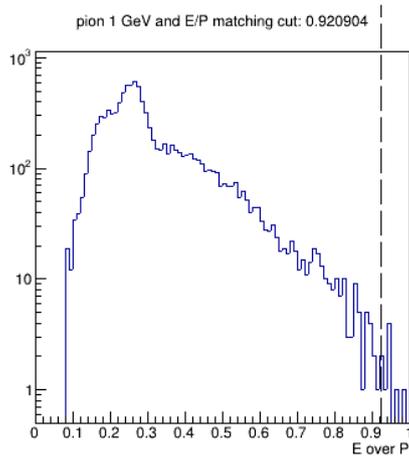


E resolution sci-glass



pion rejection [crystal]

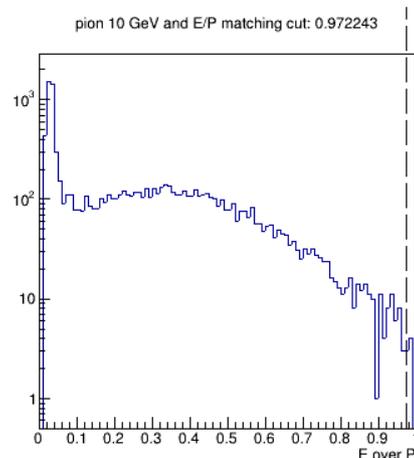
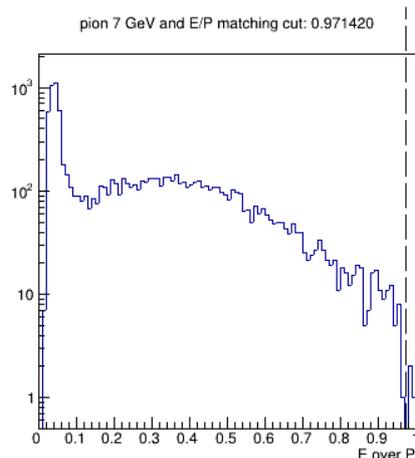
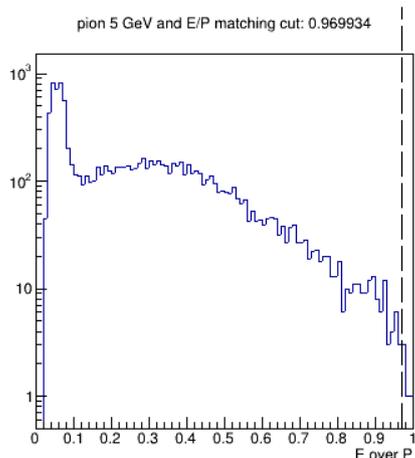
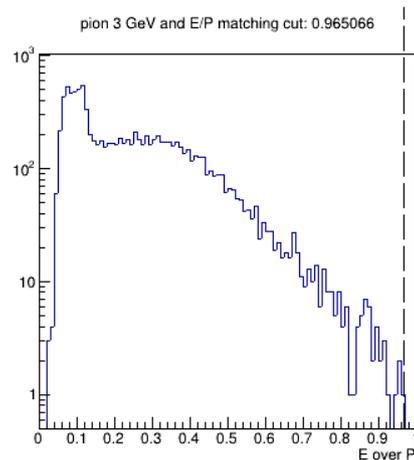
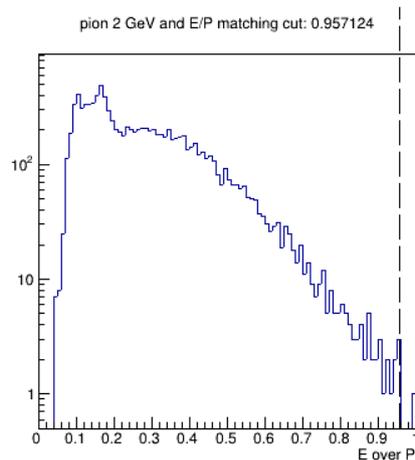
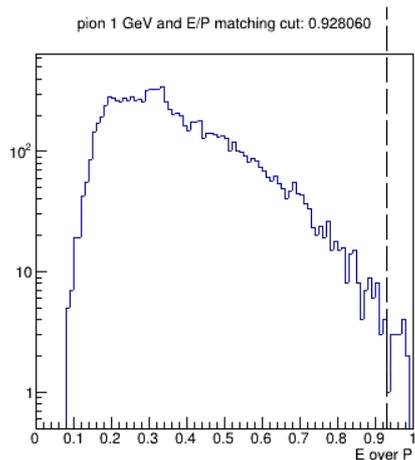
- Using the E/P matching cut: $1 - k \times \sigma/E$, $k=1.6$
- E/P: E from the cluster reconstruction, P from the primary



E[GeV]	total pi-	#pi-pass cut
1	10000	8
2	10000	2
3	10000	1
5	10000	0
7	10000	5
10	10000	12

pion rejection [sci-glass]

- Using the E/P matching cut: $1 - k \times \sigma/E$, $k=1.6$
- E/P: E from the cluster reconstruction, P from the primary



E[GeV]	total pi-	#pi-pass cut
1	10000	19
2	10000	1
3	10000	1
5	10000	5
7	10000	3
10	10000	7