

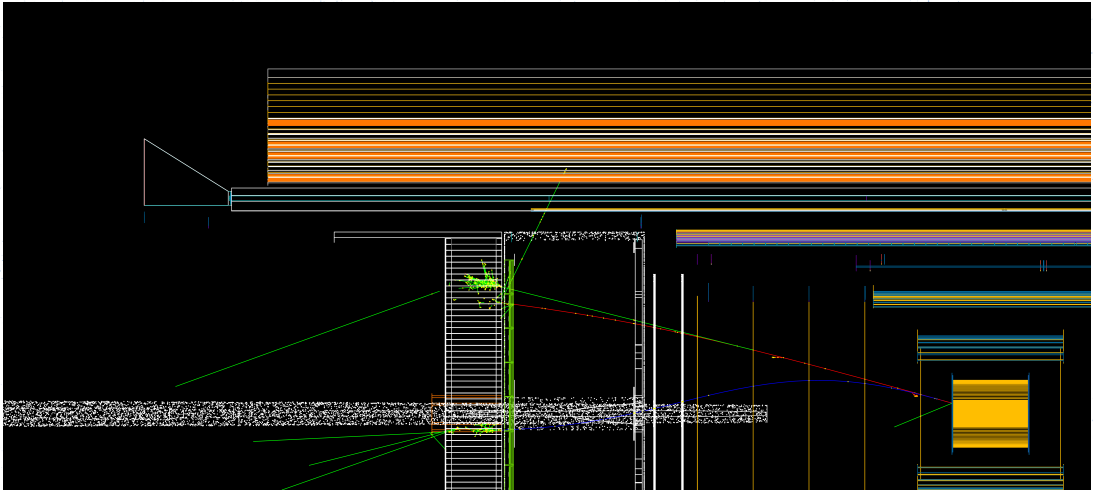


Update on neutral pions in EEEMCal

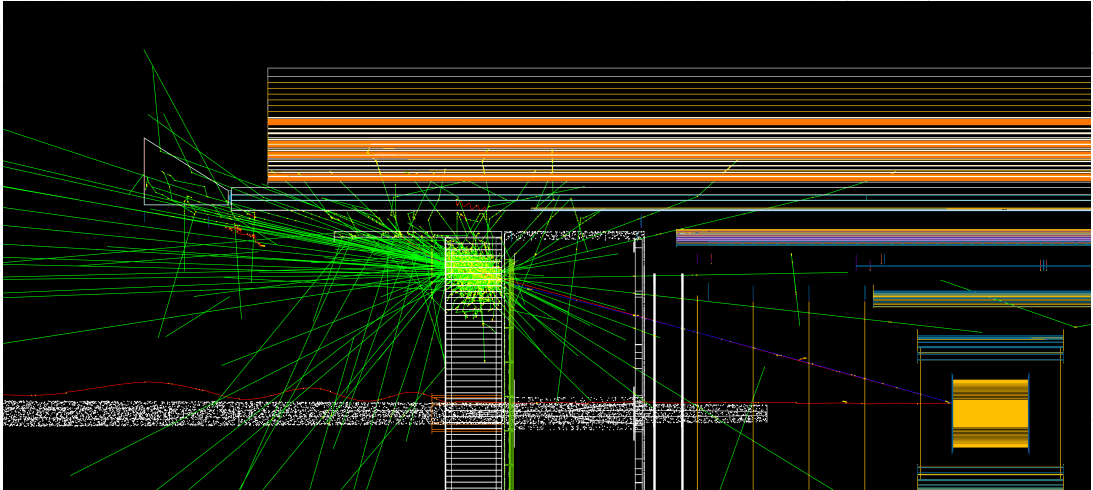
Dmitry Kalinkin

University of Kentucky

Event view (1 GeV γ)



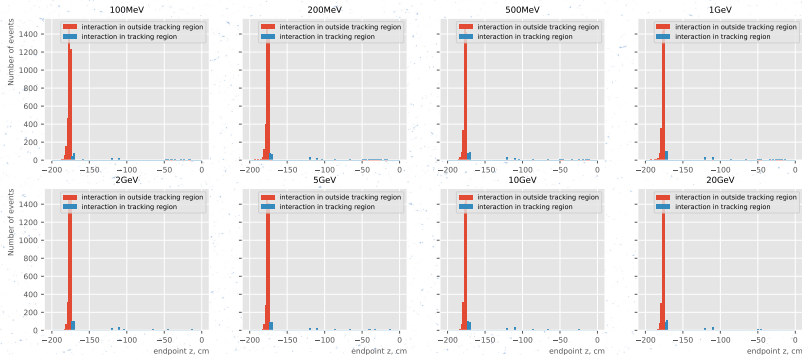
Event view (20 GeV γ)



Where interactions happen?

Location (in z) of thrown photon's interaction point

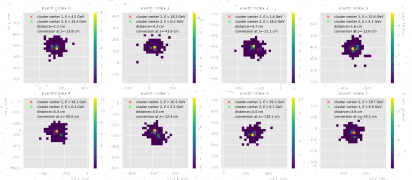
24.10.0



Distributions of distance between two leading clusters

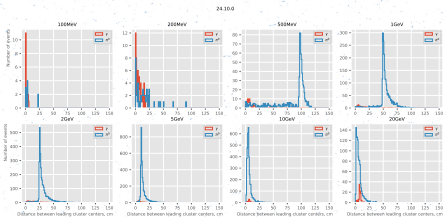
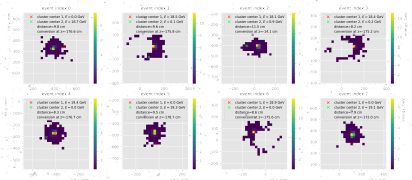
20 GeV photons
distance < 5 cm

24.10.0: 20GeV (selecting distance < 5 cm)



distance > 5 cm

24.10.0: 20GeV (selecting distance > 5 cm)



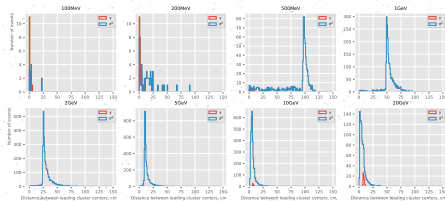
Updating to 24.10.0 removed peak at ~ 0 distance due to false splitting

Some false splitting at high energies at the edge of the cluster $\Rightarrow$ peak grows and moves to the right

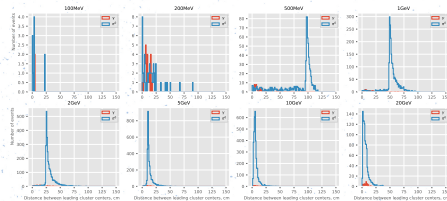
Distributions of distance between two leading clusters

Require no interaction in tracking region Require interaction in tracking region

24.19.0

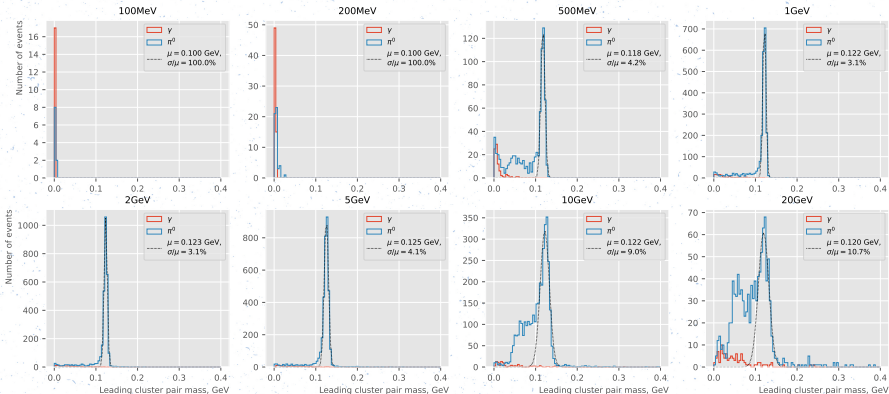


24.19.0



Mass peaks

24.10.0



Peaks have improved since 24.07.0, however masses are still off

π_0 identification

