## SCTPARSIM STATUS

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Super c– $\tau$  software meeting October 19, 2021

1/3

## Status

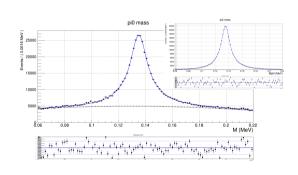
The dev fork was merged into the central master:

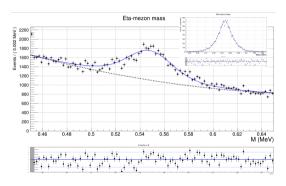
- PID reimplimentaion from the python version:
  - 1. FARICH
  - 2. Muon system
  - 3. Cluster counting by the DC
  - EDM:Particle has PID predictions from different systems.
- Add examples to run SctParSim (reading input file, generation w/ EvtGen and particle gun).
- Description of SctParSim parameters.
- Calorimeter cluster overlapping.

## For today:

- PID issues:
  - FARICH: need to use  $N_{ph. e.}$ .
  - Mu: need to smooth input mu-response histograms.
  - Fill EDM:Particle:PIDProb.
- Work on examples:
  - Reconstruct  $\pi^0, \, \eta \to \gamma \gamma$  from  $J/\Psi \to {\rm anything}.$
  - Selection of  $D^0 \to K^-\pi^+, \ K^-\mu^+\nu_\mu, \ \pi^-\mu^+\nu_\mu \ \text{events}$  from  $\Psi(3770) \to D^0\bar{D}^0.$

## Invariant mass of $\gamma\gamma$





3/3