

# SiW ECAL Simulation Update

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TB Analysis meeting

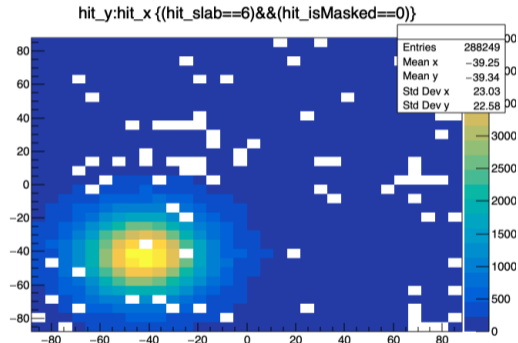
2022/09/21



# Simulations used

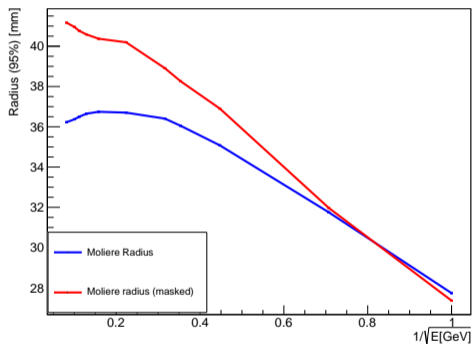
Used 1-150 GeV e- hitting on the lower left of the detector

- Conversion to mip using sim muons @ 100 GeV
- Masking now included (90474)
- In example: 1488 masked chans (<10%)

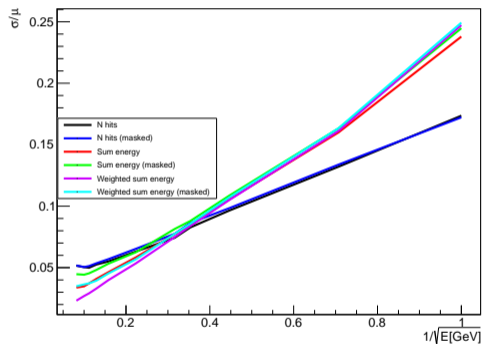


# Moliere radius and resolution vs Energy

Moliere radius vs energy

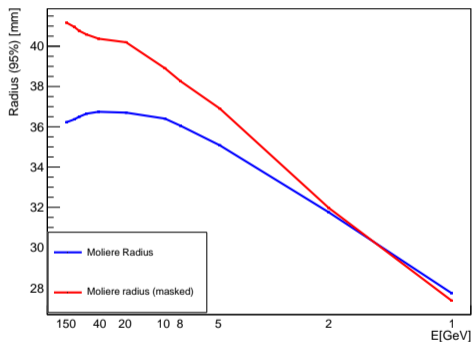


Resolution vs energy

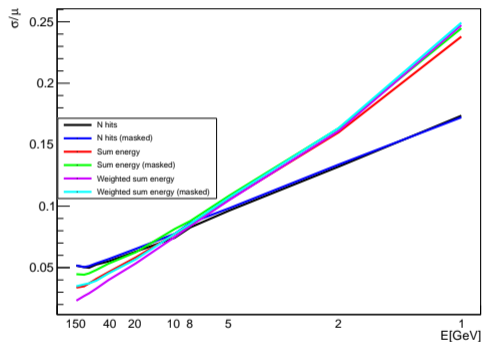


# Moliere radius and resolution vs Energy

Moliere radius vs energy

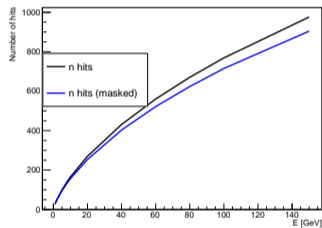


Resolution vs energy

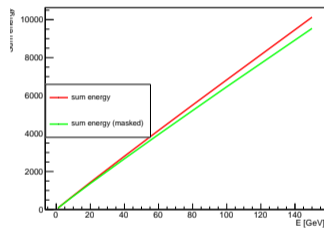


# Linearity

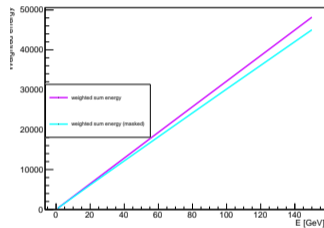
Linearity (n hits)



Linearity (sum energy)



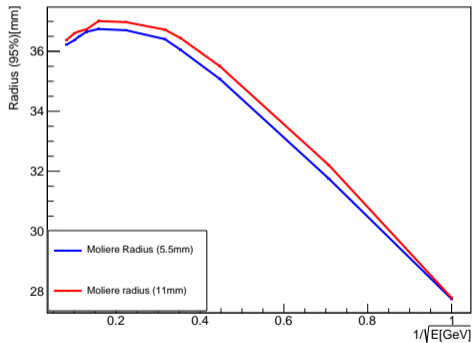
Linearity (weighted sum energy)



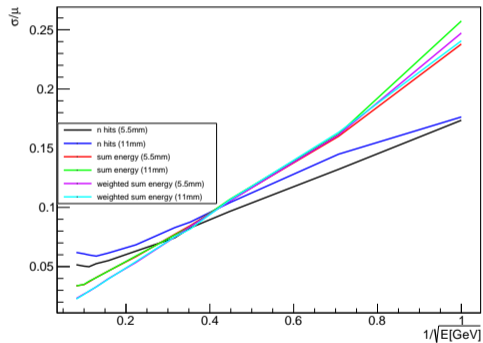
# Doubling cell size

Going from 5.5 to 11 mm squared cells

Moliere radius vs energy



Resolution vs energy



# Software latest updates

- Several updates including
  - Preparation scripts for generation and processors
  - Masking working
  - Examples, docs
- Need some update/cleanup
  - Shaping
  - Format issue
- “Usable” software (being tested by Yuichi)