## Photon Beam Test Matrix



Effective area using some of Ritz's background cuts and (16 towers), PSF cuts not yet there...
This is not the AO effective area-plots. These are made with an outdated version of merit and not all cuts implemented, in the future we will use the right code.
I want to produce plots for all test matrices to attach to our beam test plan (hopefully with $2 \times 2$ configuration)

3 Energy settings


Cosmic Ray Proton Spectrum (stolen from Mizuno)

# Energy vs Angle (hadrons ~ 1 month) 

Also shoot from the back

|  | 0 deg | 45 deg | 87 deg | 93 Deg |
| :--- | :--- | :--- | :--- | :--- |
| 2 GeV |  |  |  |  |
| 5 GeV |  |  |  |  |
| 13 GeV |  |  |  |  |

2 impact points: Thin Si layer
Thick Si layer



Proton entered here (CAL)
No ACD hits

## How are we doing?

Need these in the next 2 weeks

- Test Matrices (electron, photon and hadron) + simulation
- Identified 3 possible photon beams
- Will set up a CR test and hopefully with a Van der Graaf
- Try to keep both $2 \times 2$ and 1x4 configurations
- Started planning for beam test proton analysis
- Need High energy protons/positrons test matrix + plans for backsplash
- Need to investigate hadron beam @ BNL/FNAL
- Need to study L1T jitters and timing
- Need to include alignment
- Need input from GSE
- Need a write up about LAT in a beam (need input from
DAQ and electronics groups)
- Schedule, facilities resources and risks

