

Forward Spectrometer Update

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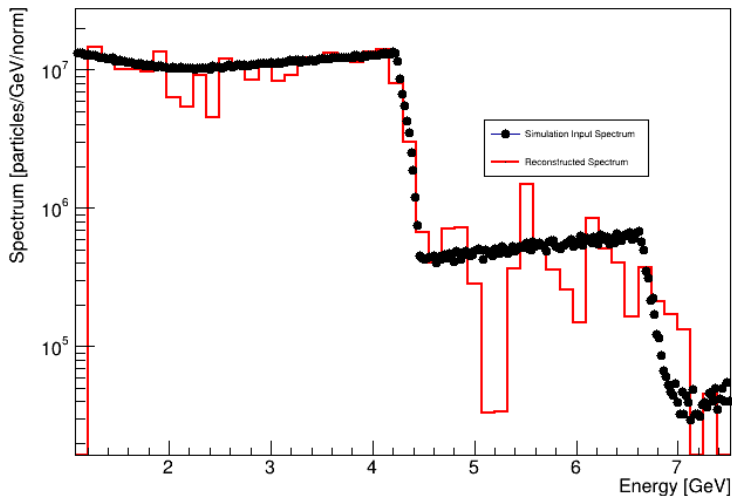
08/12/20

Updates

- Deconvolution algorithm has been updated with corrected Bethe-Heitler function from Tsai
- Improved implementation of the pair production in air contribution
- Scaling issue has been resolved for $\xi = 0.31$ and $\xi = 3.10$ test cases
- Application of deconvolution to GEANT4 data underway - in process of writing script to convert the data to correct format
- Radiation maps in similar stage; python conversion from GDML to FLUKA is mostly functioning - slight problem with definition of rotations of bodies which won't allow simulation to run
- Scripts are being finished to convert MC files to appropriate input for FLUKA automatically as well as run the simulation and analyse output

Deconvolution Results - $\xi = 0.31$

HICS 16.5 GeV 50 μm - 50 bins



Deconvolution $\xi = 3.10$

HICS 16.5 GeV 50 μm - 50 bins

