

# v13 rotation plots

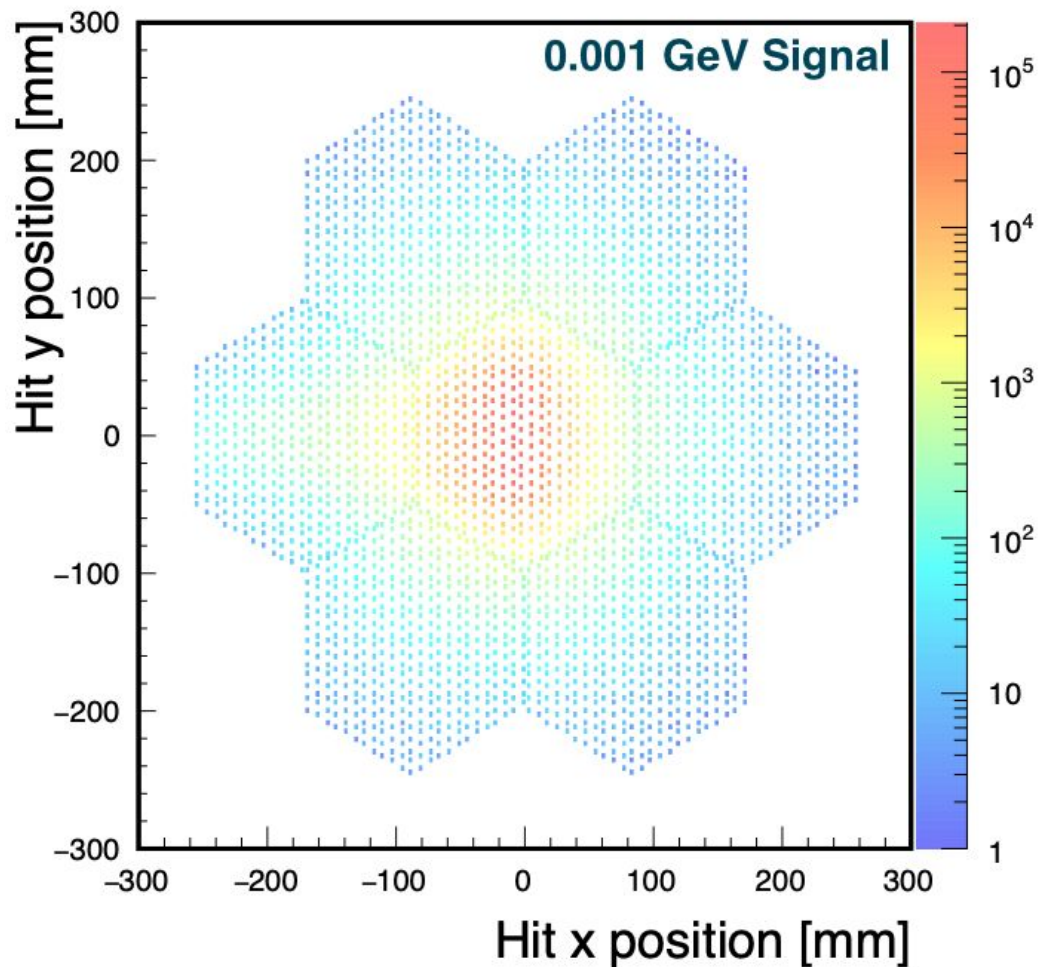
Hongyin Liu

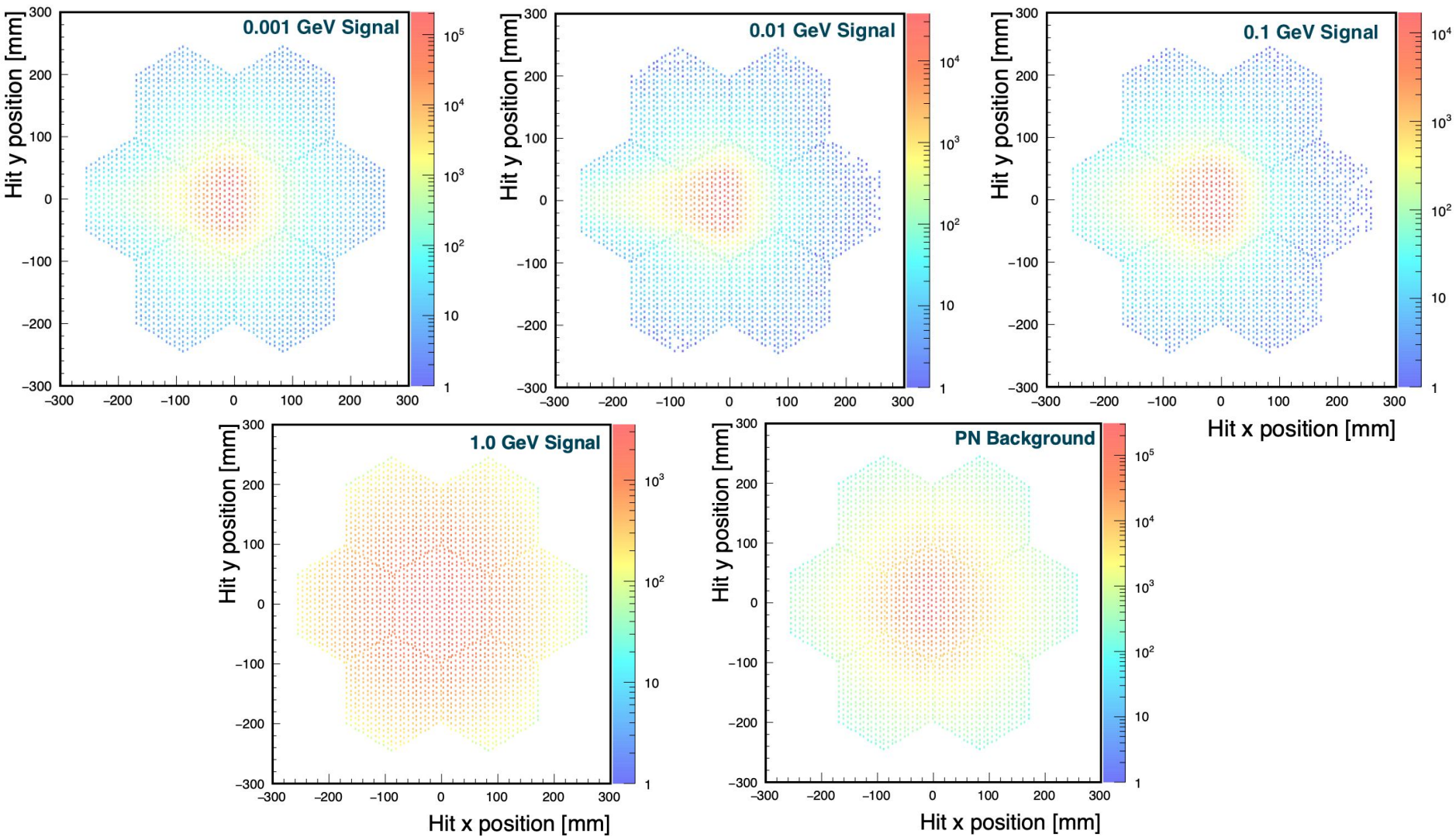
July 28, 2021

# It is rotated!

Samples:

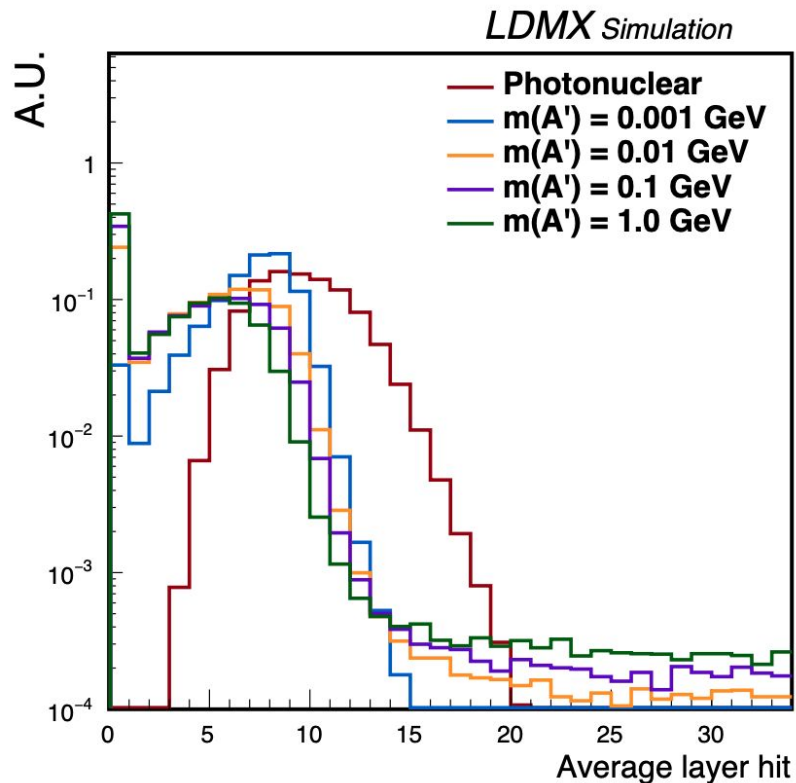
- 0.001 GeV: ~0.25M events
  - 0.01 GeV: ~0.1M events
  - 0.1 GeV: ~0.085M events
  - 1.0 GeV: ~0.2M events
  - PN background: ~0.3M events
- events



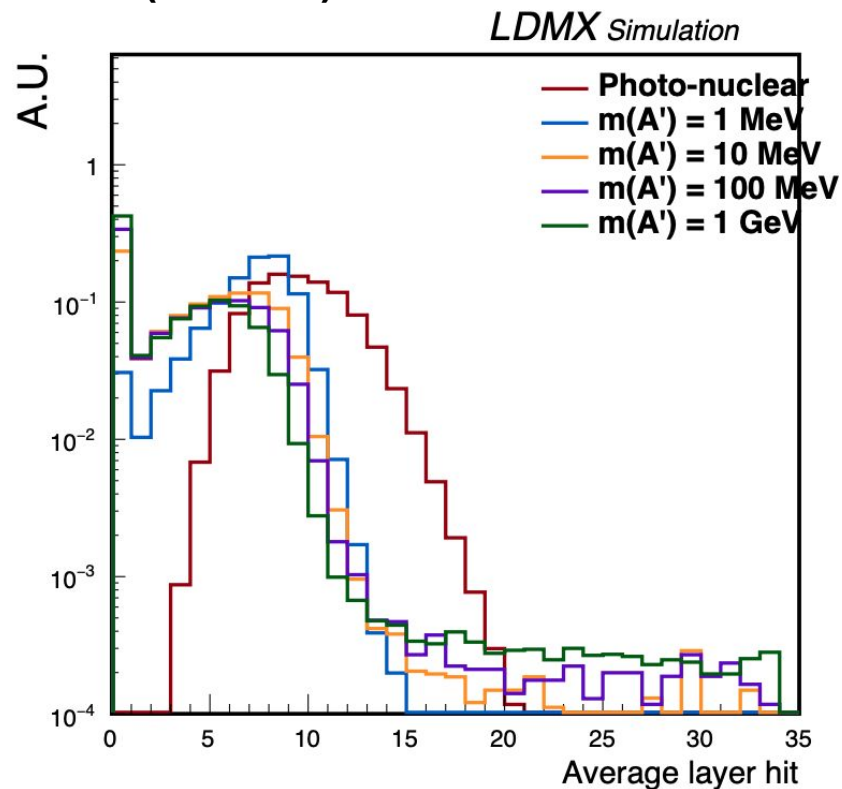


# Average Layer Hit

v12 (unrotated)

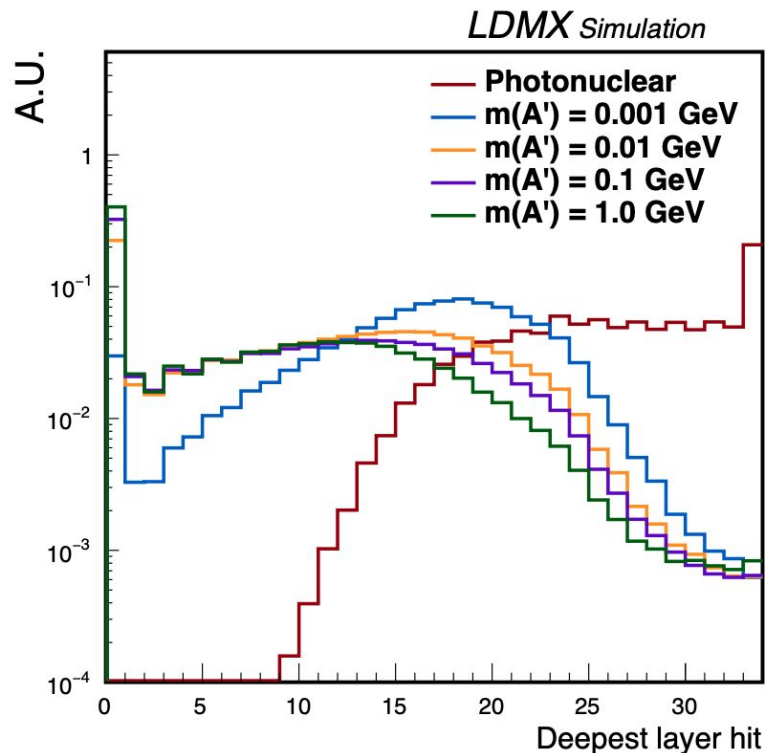


v13 (rotated)

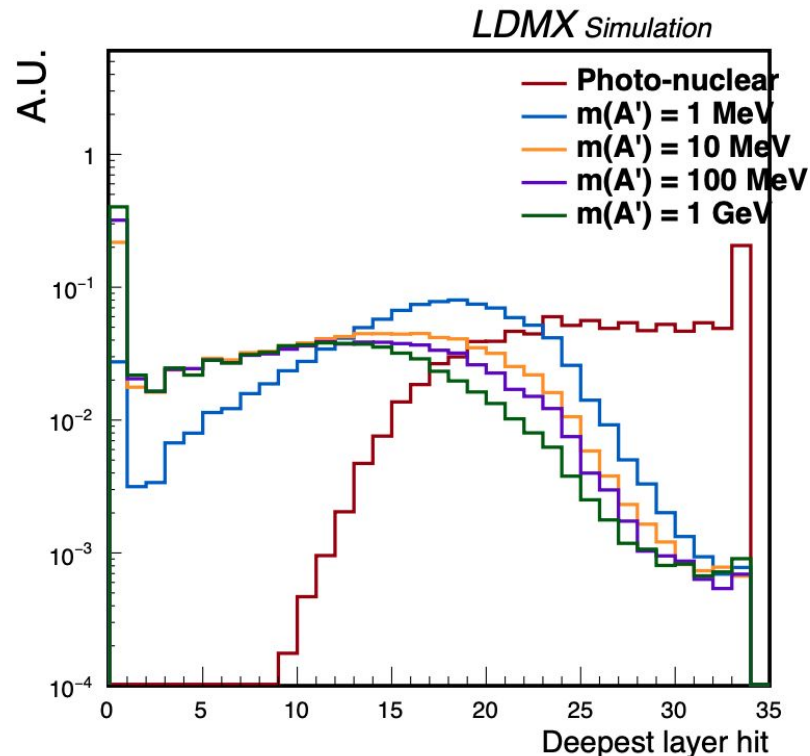


# Deepest layer hit

v12 (unrotated)



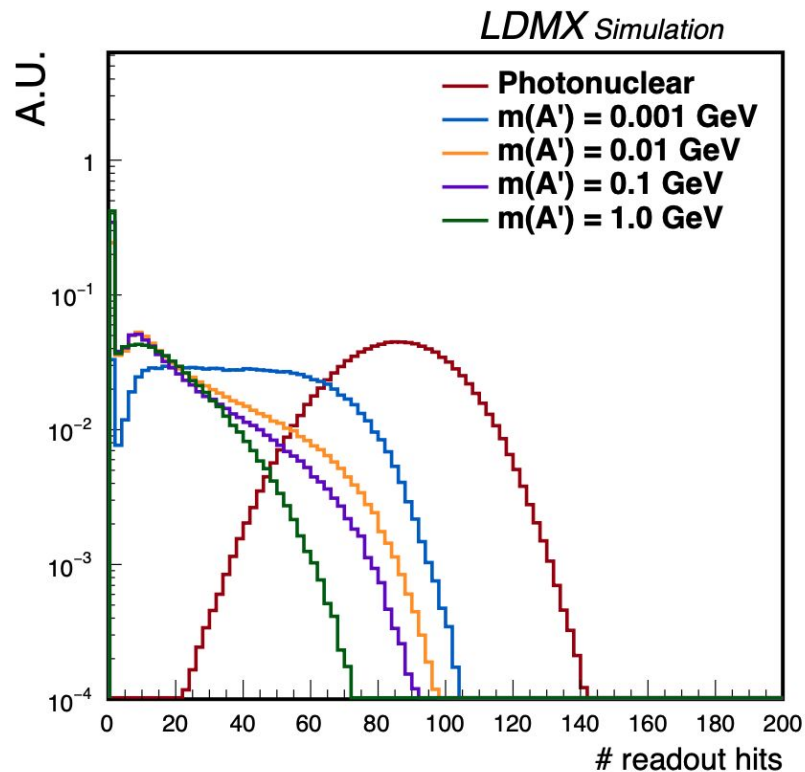
v13 (rotated)



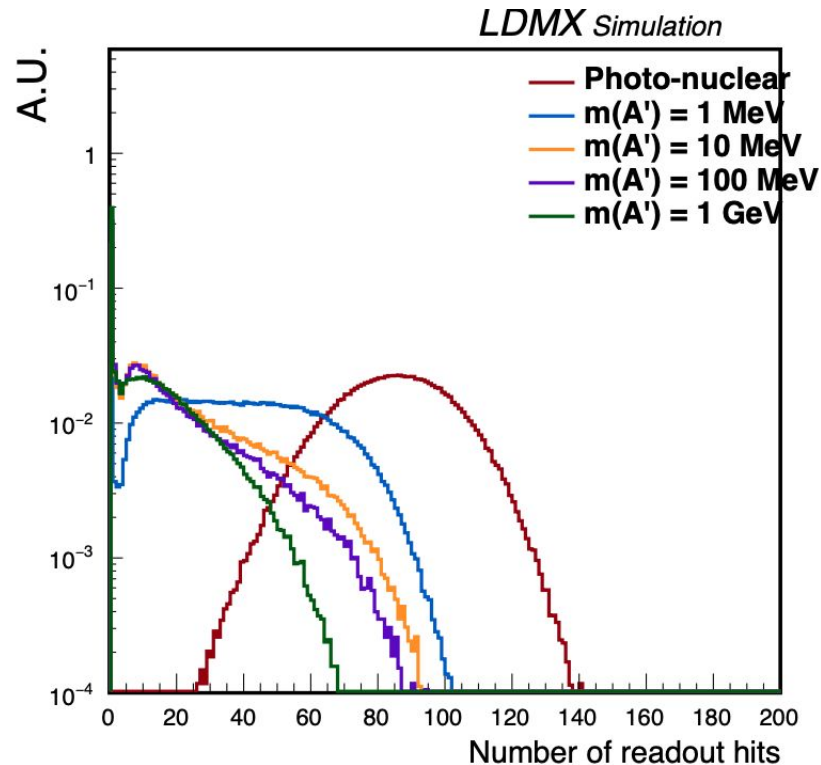


# Number of Readout Hits

v12 (unrotated)

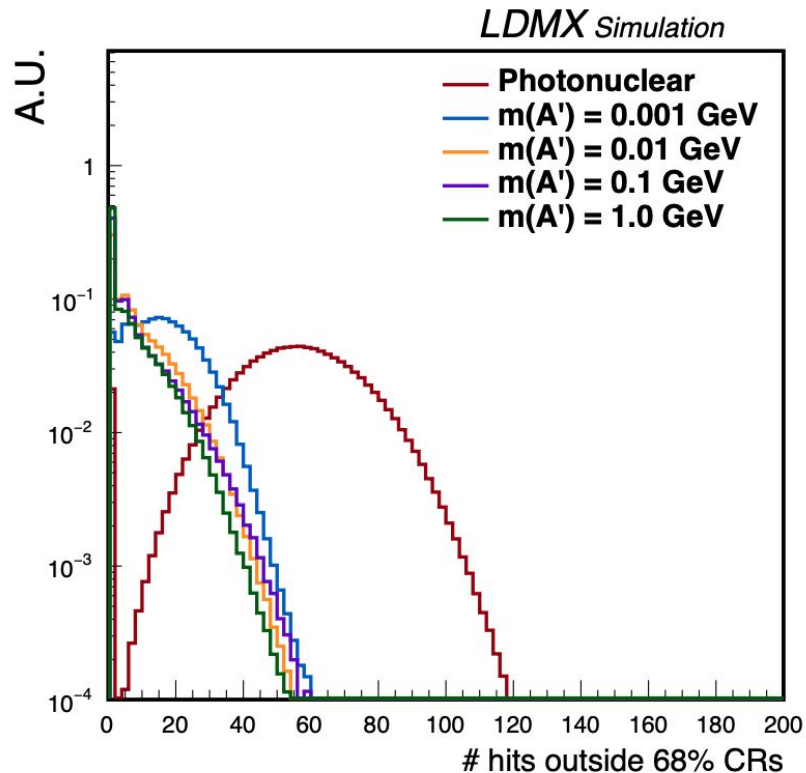


v13 (rotated)

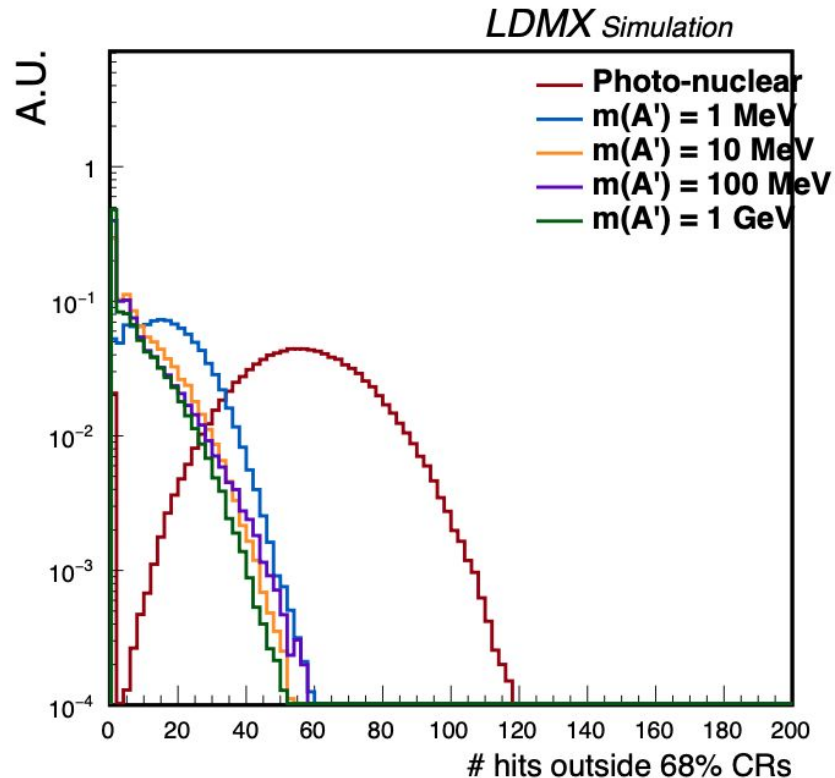


# # of Outside Containment Hits

v12 (unrotated)

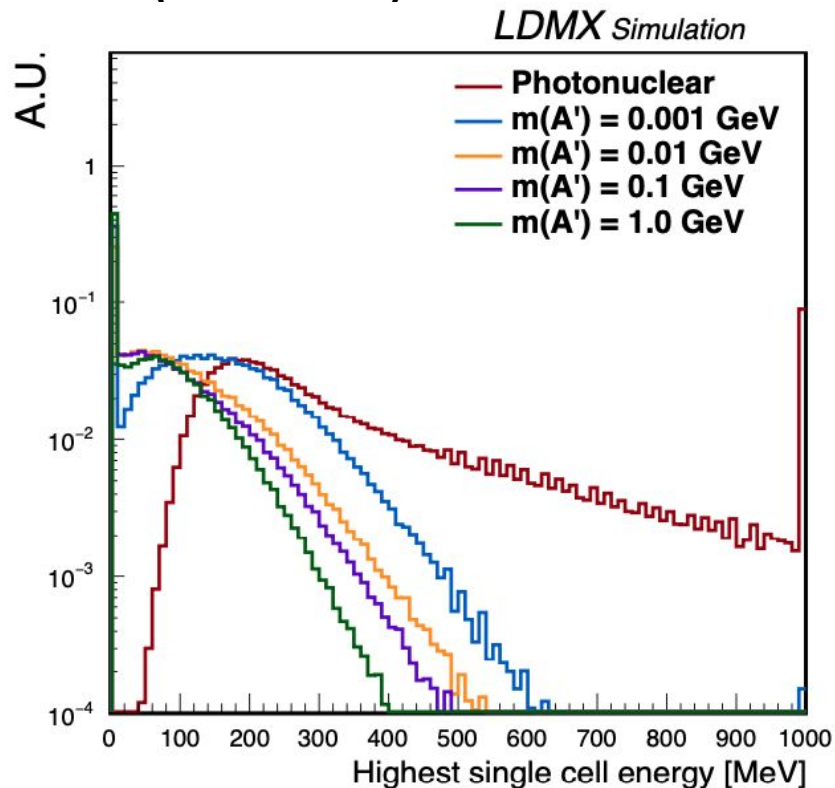


v13 (rotated)

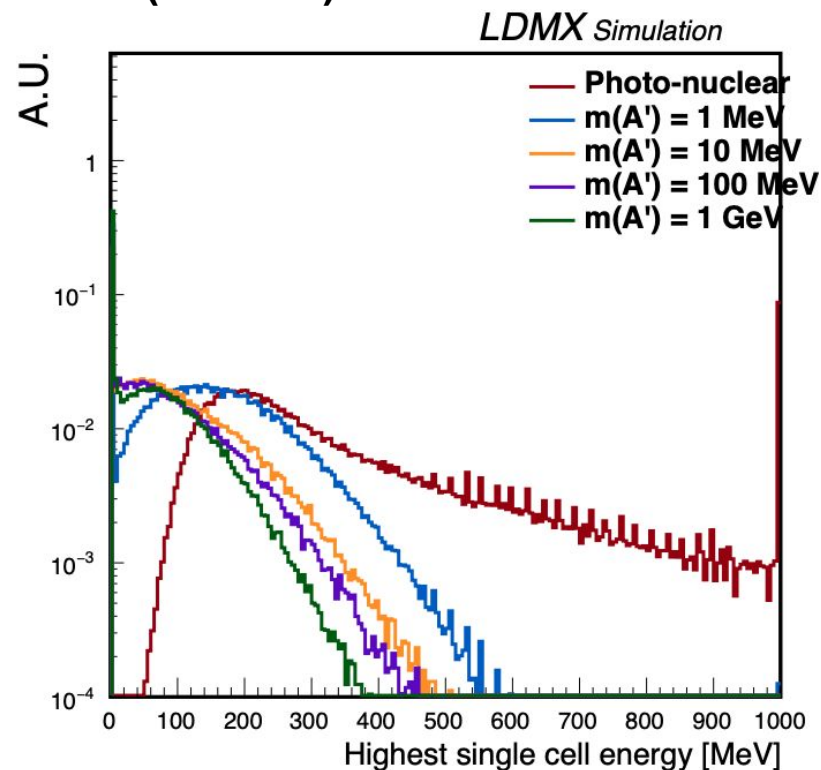


# Highest Single Cell Energy

v12 (unrotated)



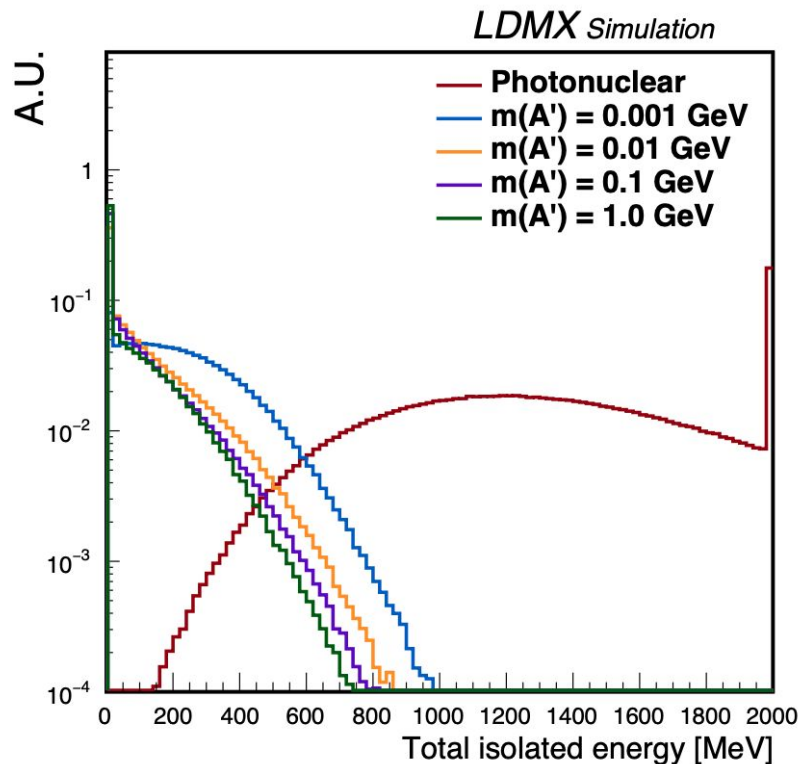
v13 (rotated)



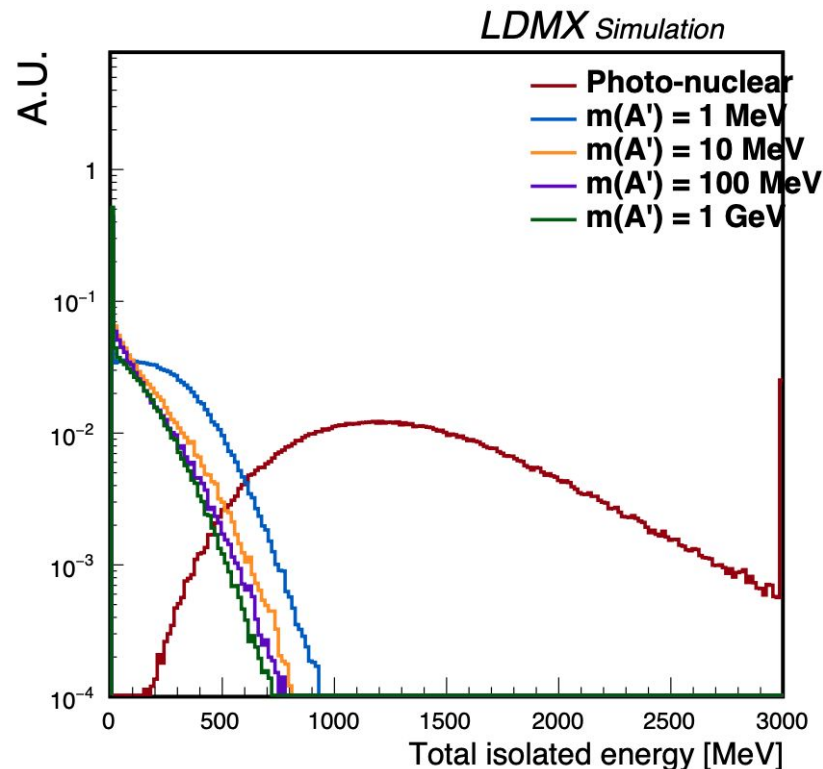


# Total Isolated Energy

v12 (unrotated)

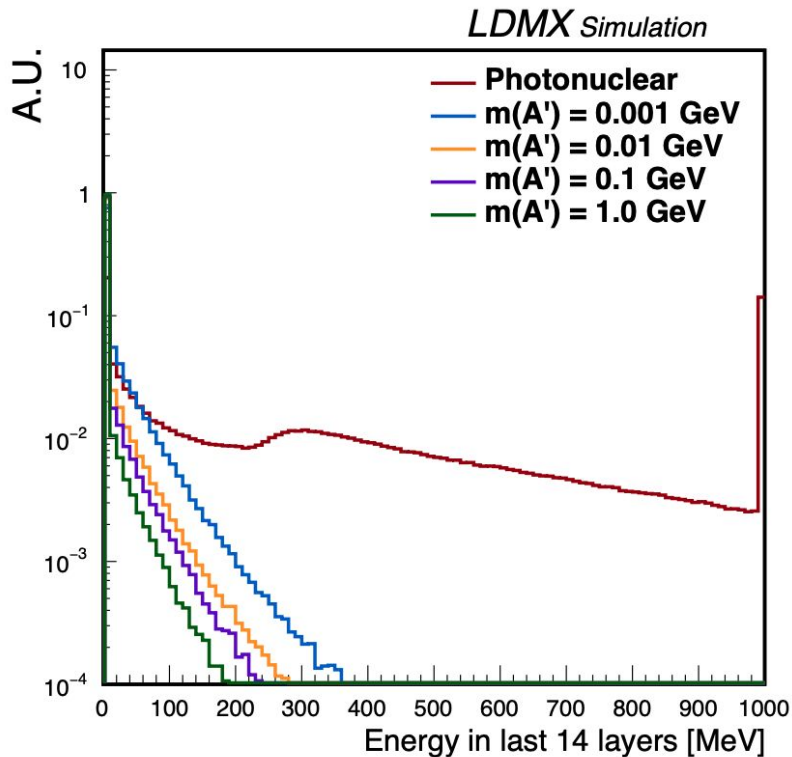


v13 (rotated)

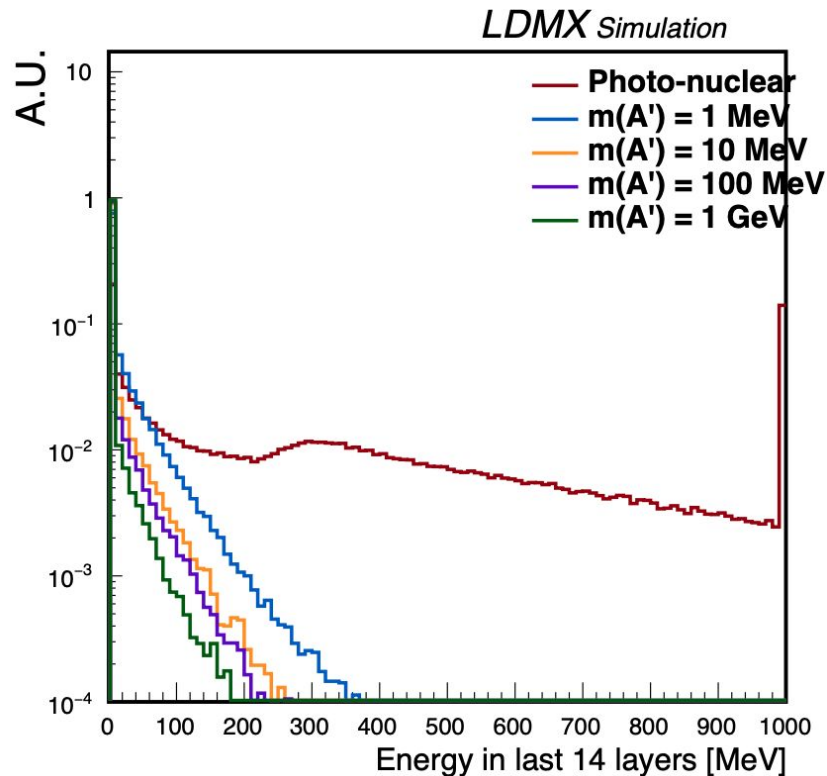


# Ecal Back Energy

v12 (unrotated)

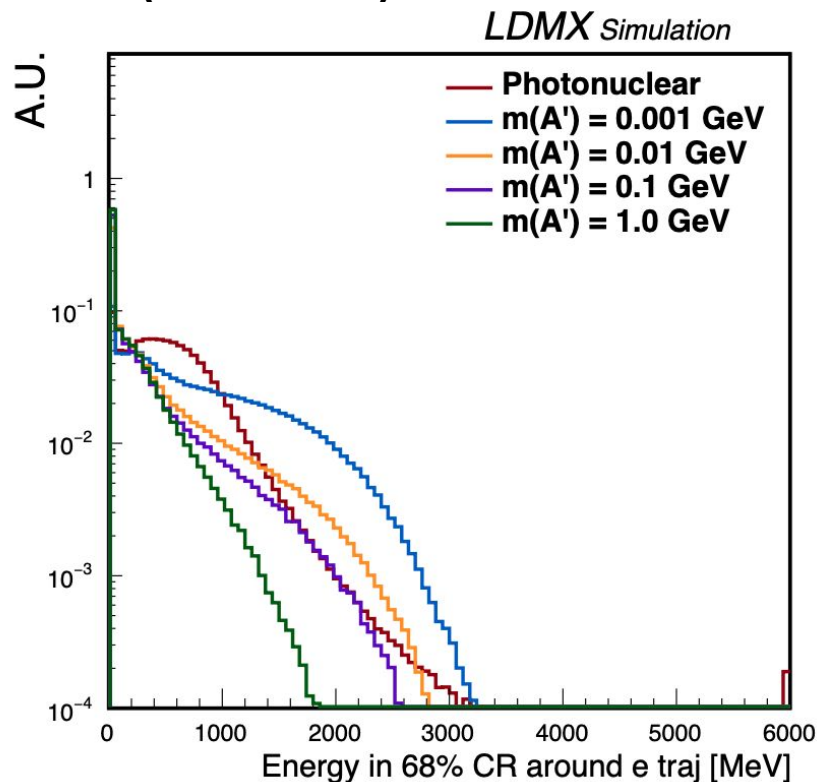


v13 (rotated)

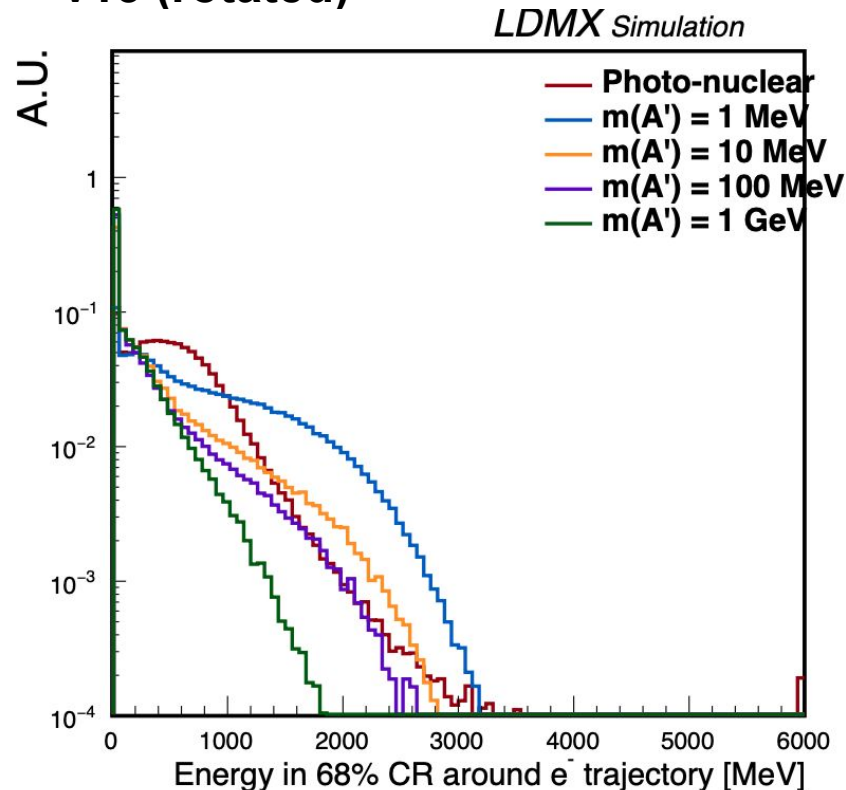


# Electron Containment Energy

v12 (unrotated)

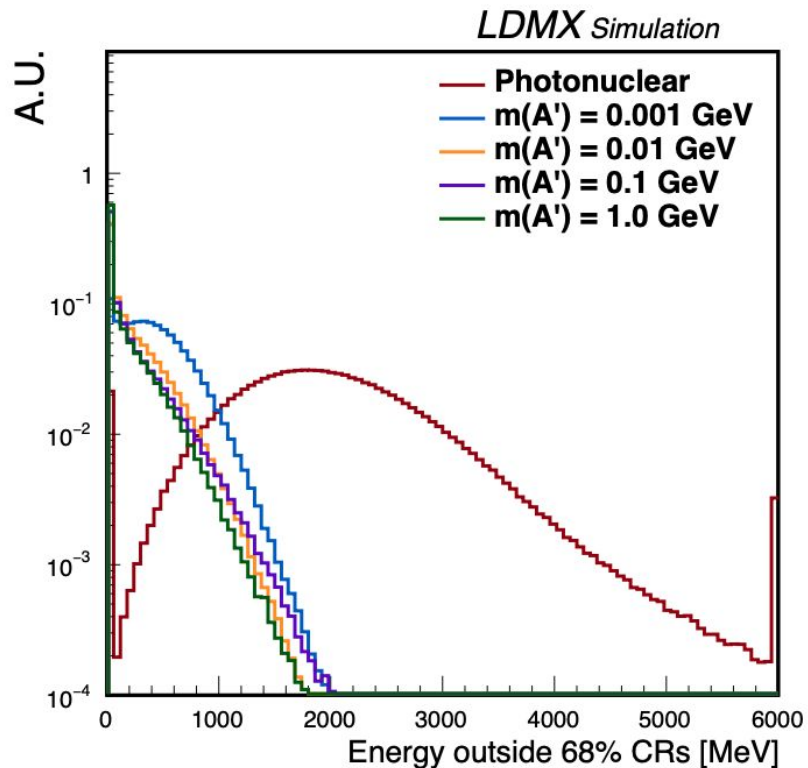


v13 (rotated)

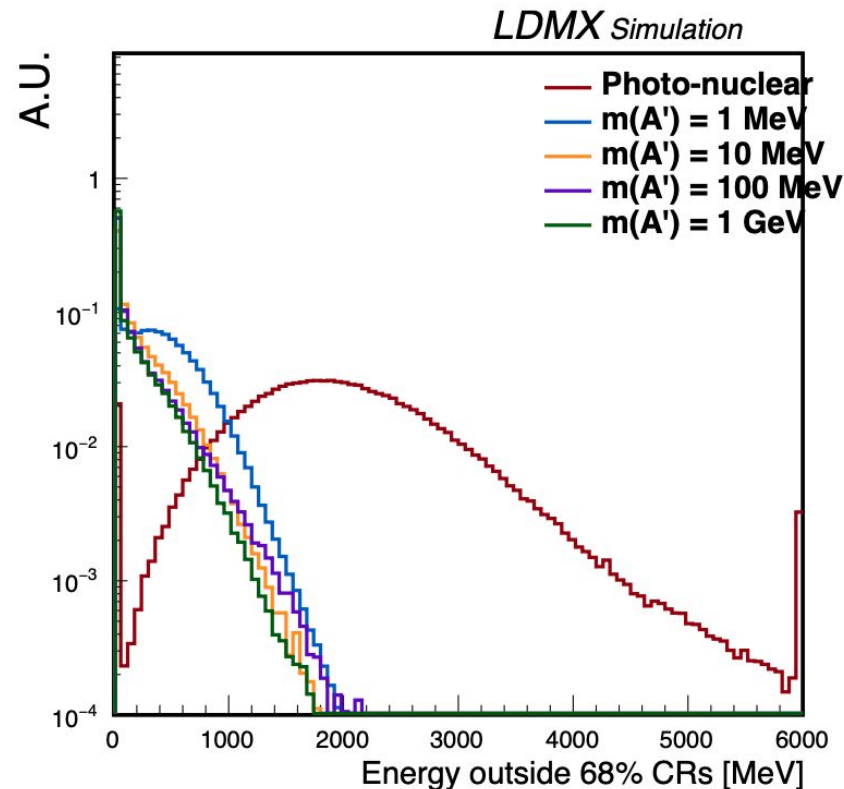


# Outside Containment Energy

v12 (unrotated)

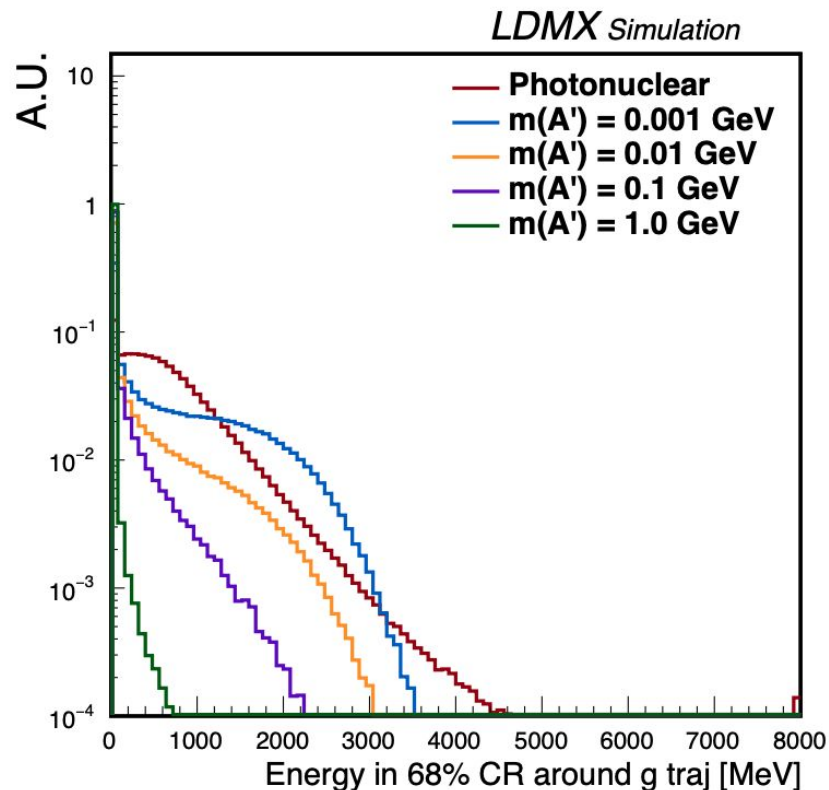


v13 (rotated)

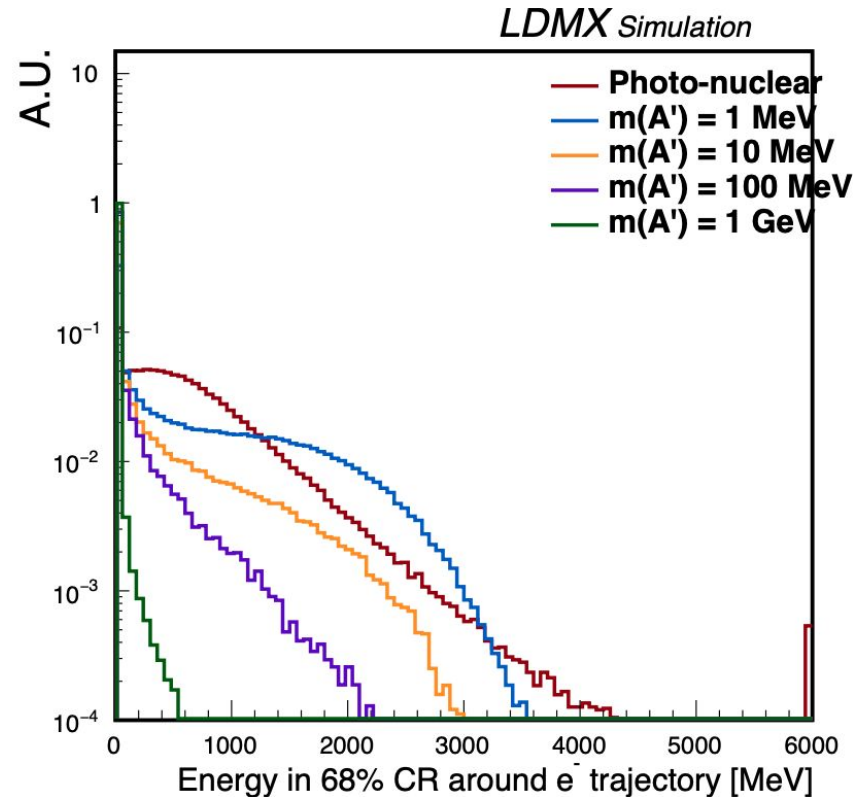


# Photon Containment Energy

v12 (unrotated)



v13 (rotated)



# More Plots

- A more complete set of v13 plots is in this link:

[https://drive.google.com/drive/folders/11iPGkGru4TMAyI\\_Cln3kdRVi5D\\_DzdRf?usp=sharing](https://drive.google.com/drive/folders/11iPGkGru4TMAyI_Cln3kdRVi5D_DzdRf?usp=sharing)

- Note for plots in this link (two minor problems):
  - These are only the “base” plots, and no “trigger” plots (as there was a problem when plotting, which made all trigger filtered plots empty)
  - The hitZ plot is empty (this is also a plotting issue, the hitZ in the original root tree sample is non empty).