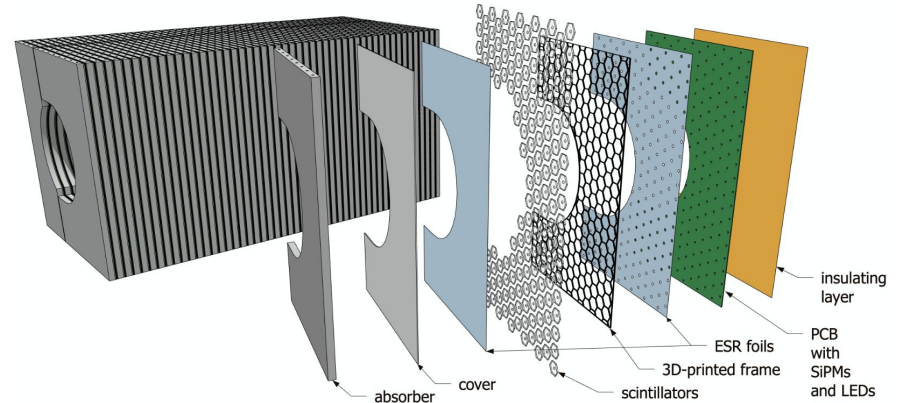
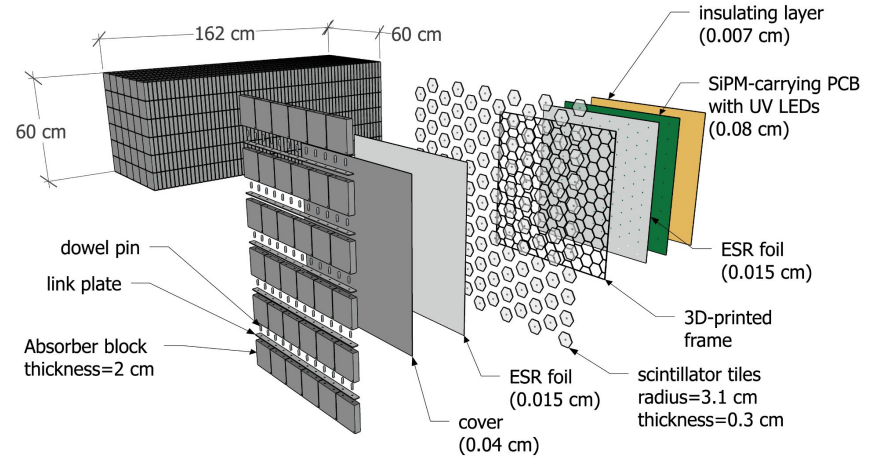
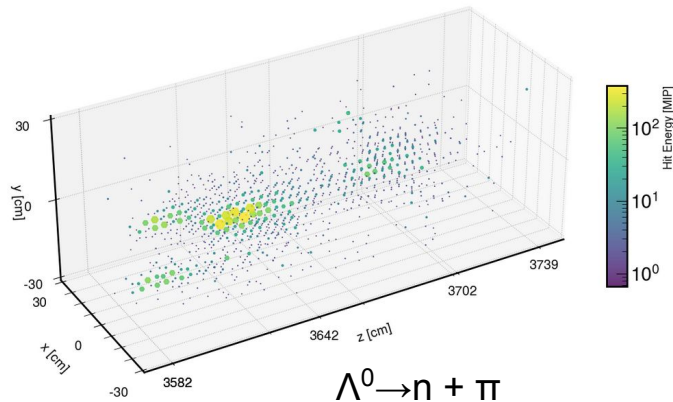


# GNNs for reconstruction

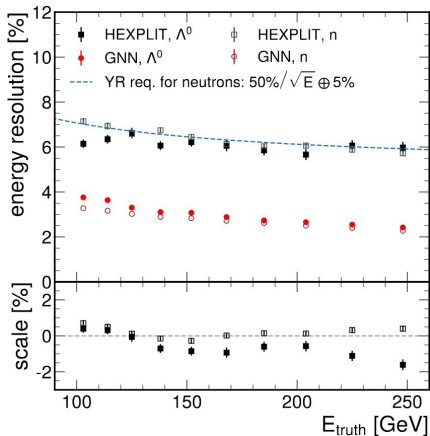
- Highly granular readout of insert & ZDC as graphs, predict event info
- Improvements in energy + angular resolutions, classification
- Optimizing detector designs through ML



# Current status

- Achievements:
  - Explored how segmentation affects ML output (JINST 19 (2024) 06, P06002)
  - Improvements in neutron reconstruction for ZDC (arXiv:2406.12877)

- Current:  $\Lambda^0 \rightarrow n + \pi$  reconstruction in ZDC



Preliminary but paper releasing within next couple of weeks!

