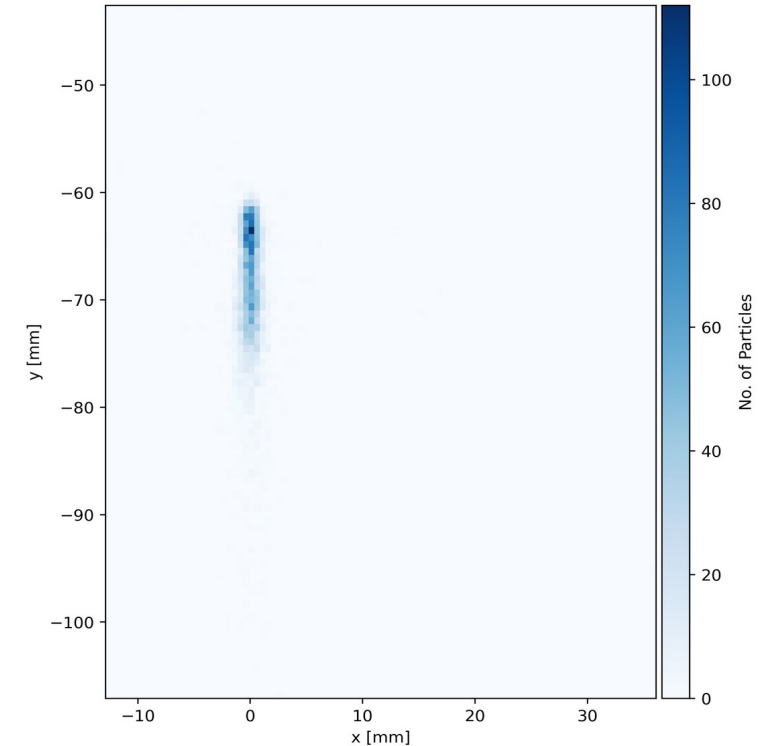


EDS Summer Student Project

Neural Network trained on ETTSim

- Classify a_0 (distribution) based on screen spectrum with varying levels of noise
- Summer student already has experience with Machine Learning and PyTorch
- Could be useful for categorising images of real spectra
- Will need quite a bit of Ptarmigan data
- I will need to refresh my knowledge of ML



EDS Summer Student Project

Reconstruct Beam Spot Distribution EDS@E320

- Currently we have a saturated beam spot in most images, due to focus on Compton spectrum
- For the Cherenkov detector and EDS@LUXE it is useful to know distribution
- Reconstruction is non-trivial due to beam shape
- Could be done using:
 - Simulations
 - E320 EPICS data
 - Unsaturated images from exposure time scans with e-beam only

