

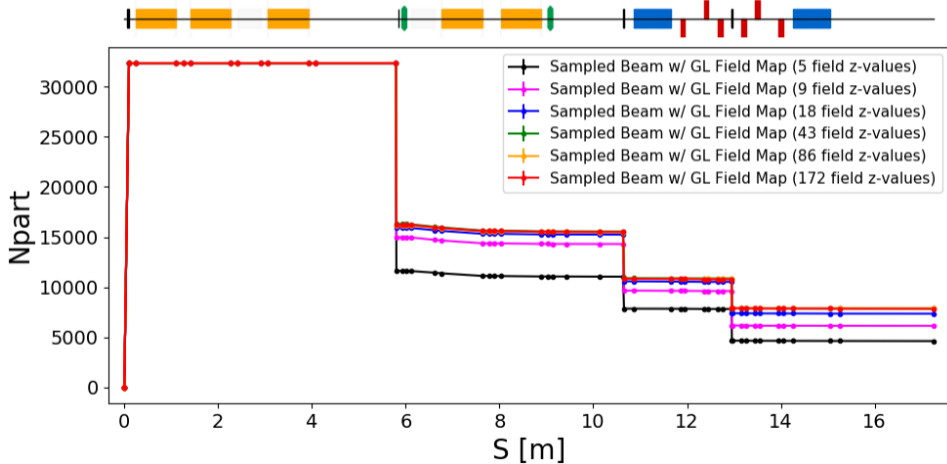
LhARA: Capture Meeting

Hin Tung Lau

June 3, 2021

Field map generation comparison

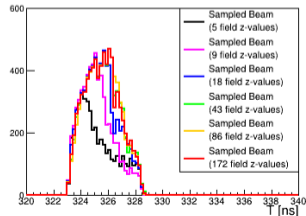
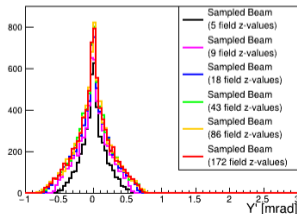
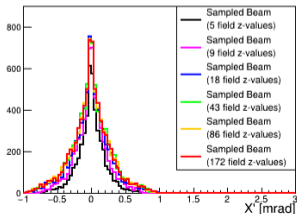
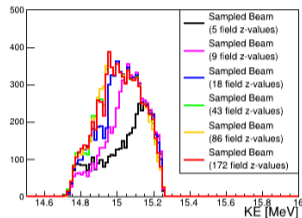
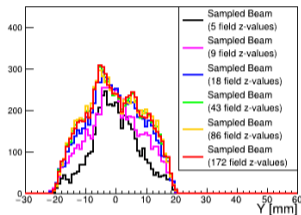
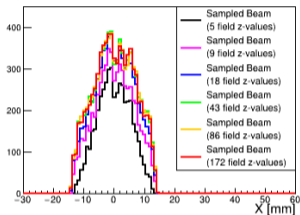
- Resolved issue with generating the field maps.
- Appears the interpolation requires a certain amount of z-values to be defined for the field maps.



Field map generation comparison

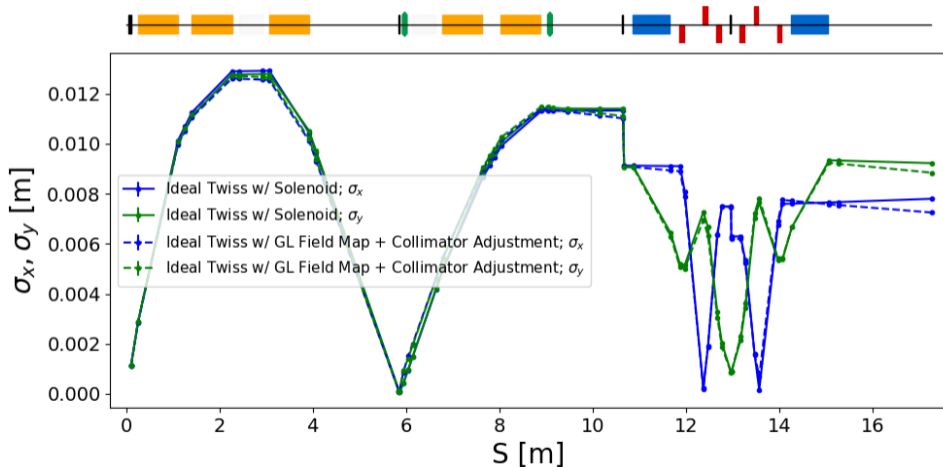
- Went with the green setting.

Field Map Generation Setting Comparison: At End Station

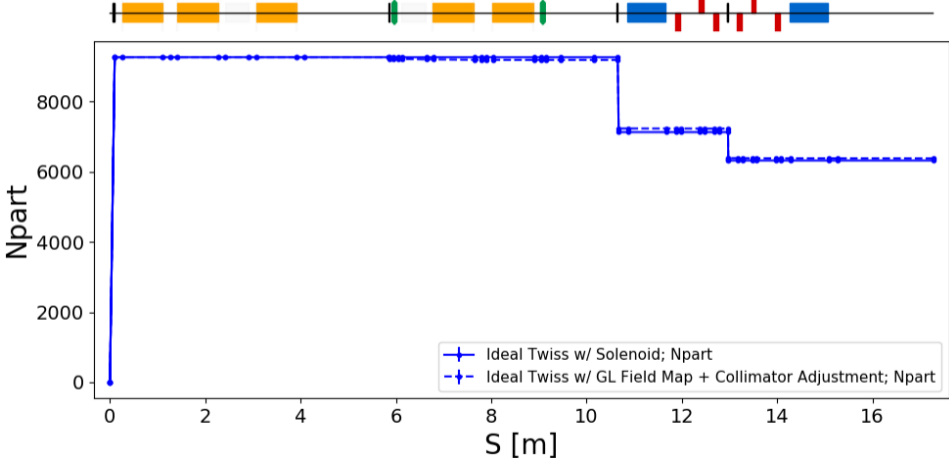


Ideal Beam with Gabor Lens Field Maps (Update)

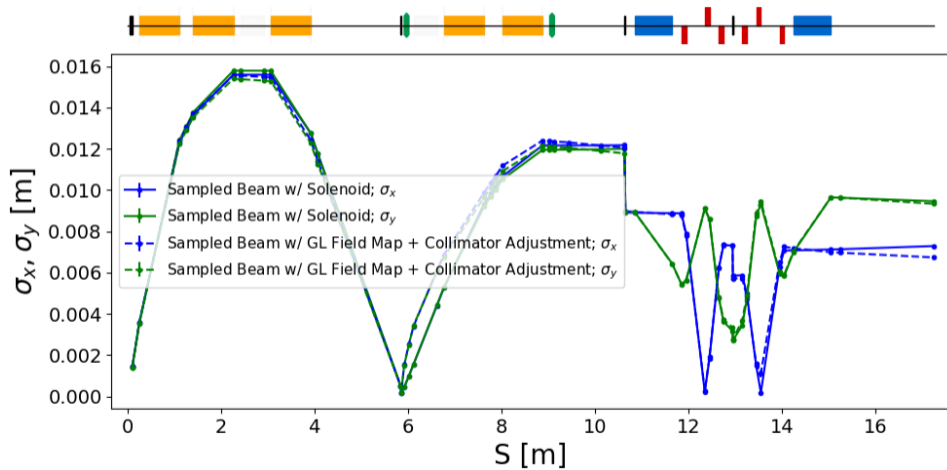
- Added an additional positional offset so collimator located at focal point of third Gabor lens for field maps.



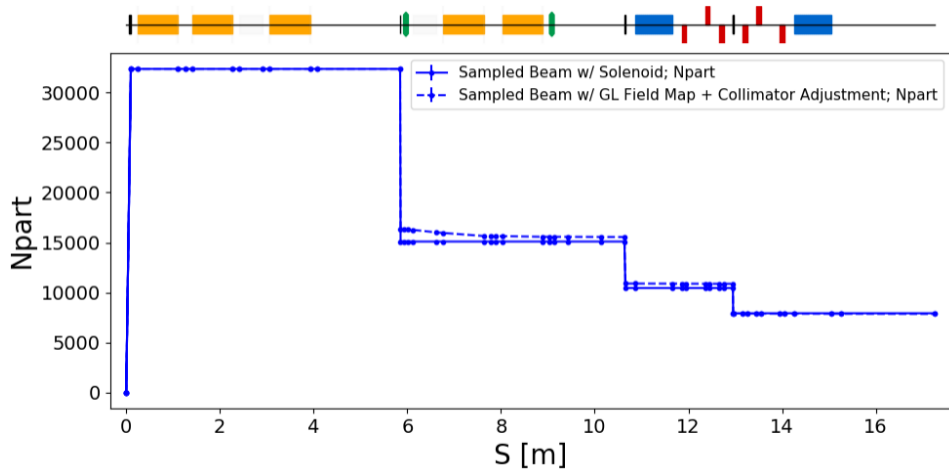
Ideal Beam with Gabor Lens Field Maps (Update)



Sampled Beam with Gabor Lens Field Maps (Update)

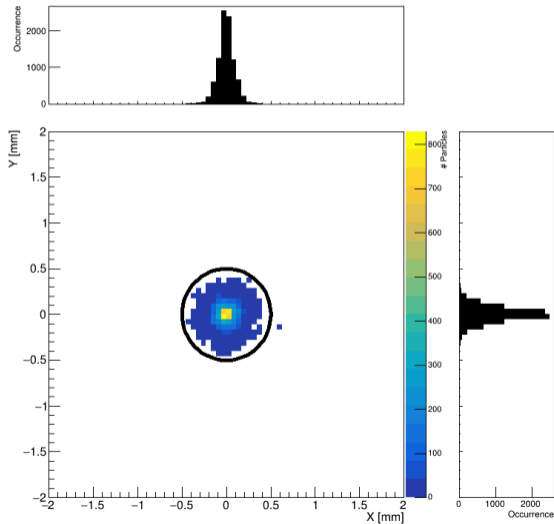


Sampled Beam with Gabor Lens Field Maps (Update)

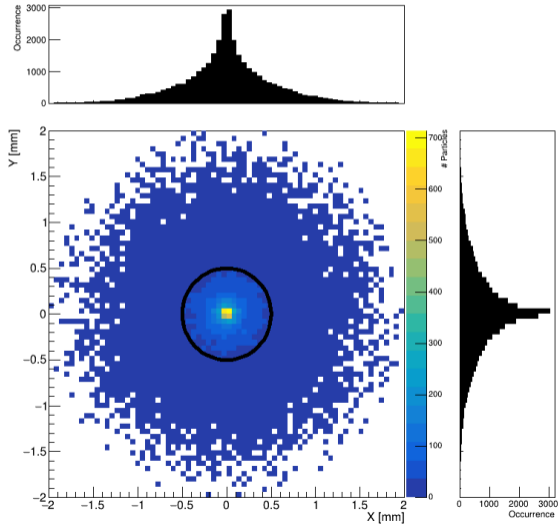


Right before energy collimator

Ideal Beam w/ GL: Entry of Collimator at ~6m

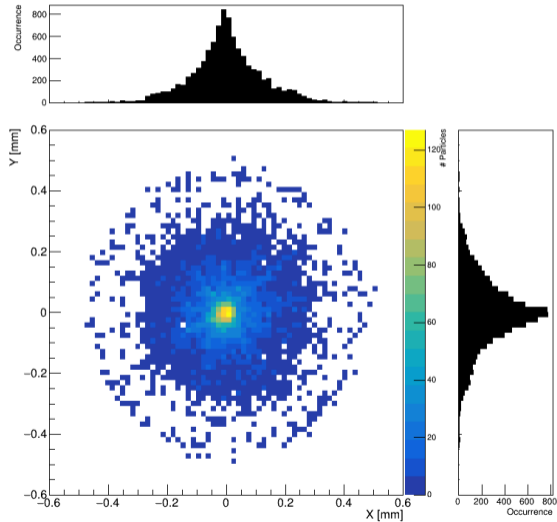


Sampled Beam w/ GL: Entry of Collimator at ~6m

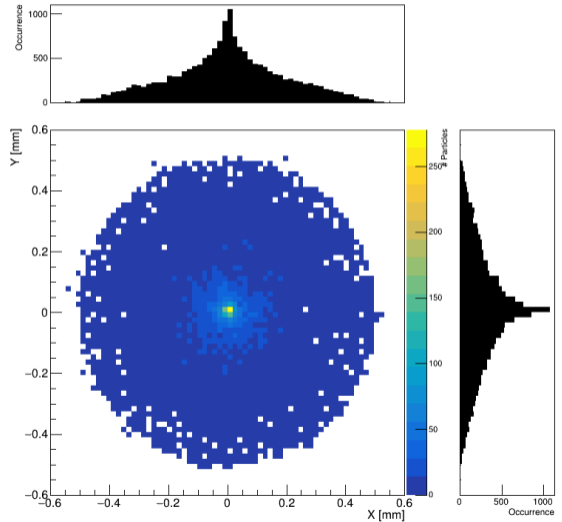


End of energy collimator

Ideal Beam w/ GL: End of Collimator at ~6m

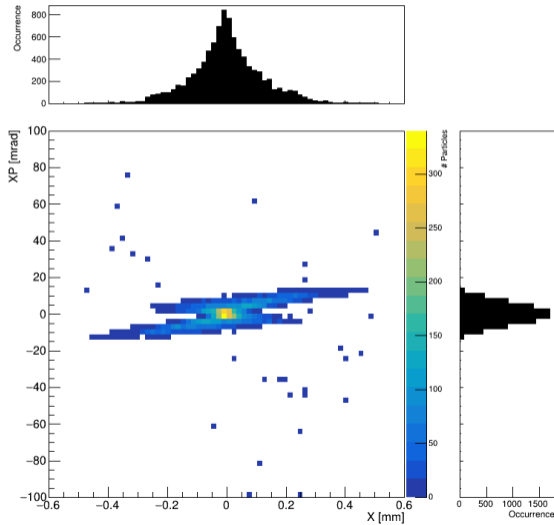


Sampled Beam w/ GL: End of Collimator at ~6m

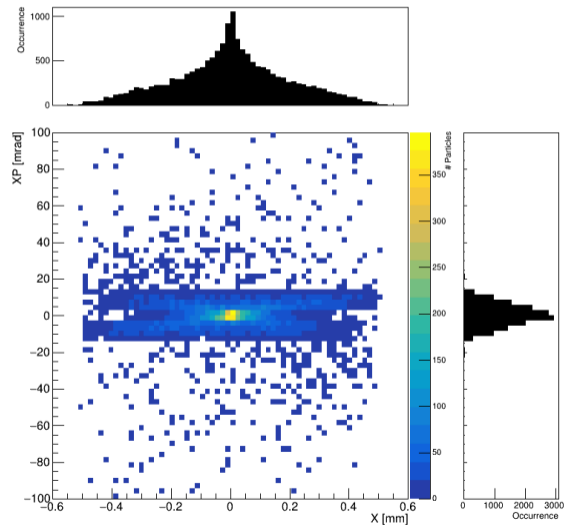


End of energy collimator

Ideal Beam w/ GL: End of Collimator at ~6m

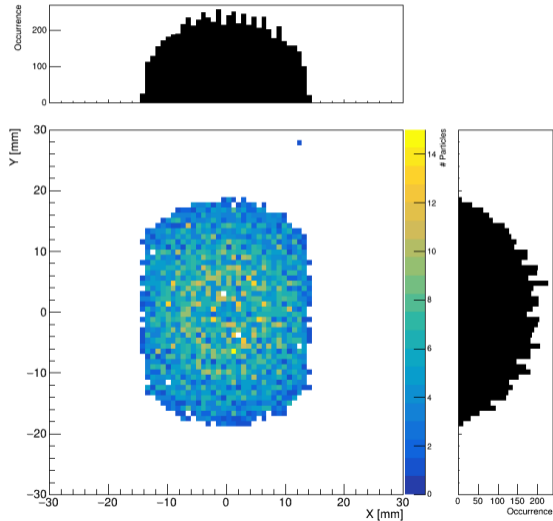


Sampled Beam w/ GL: End of Collimator at ~6m

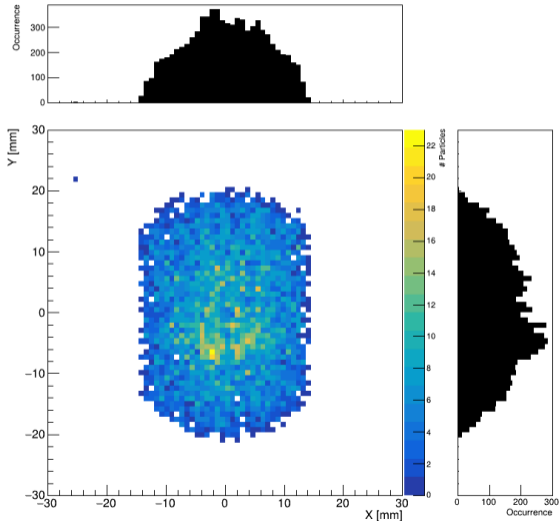


At end station

Ideal Beam w/ GL: Stage 1 End

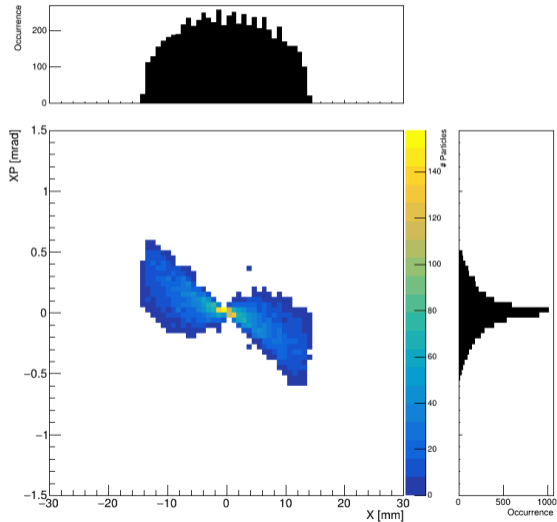


Sampled Beam w/ GL: Stage 1 End

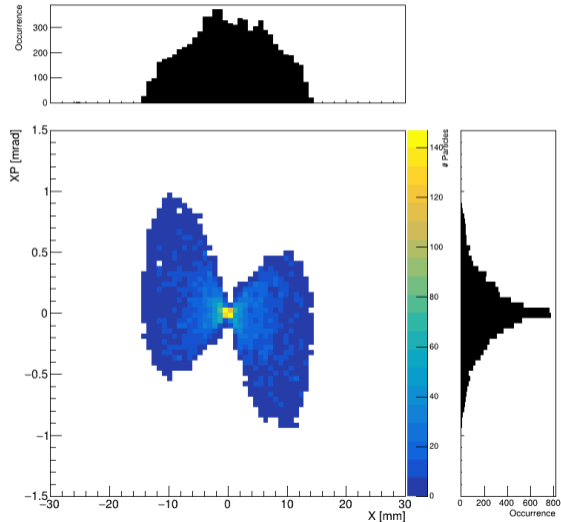


At end station

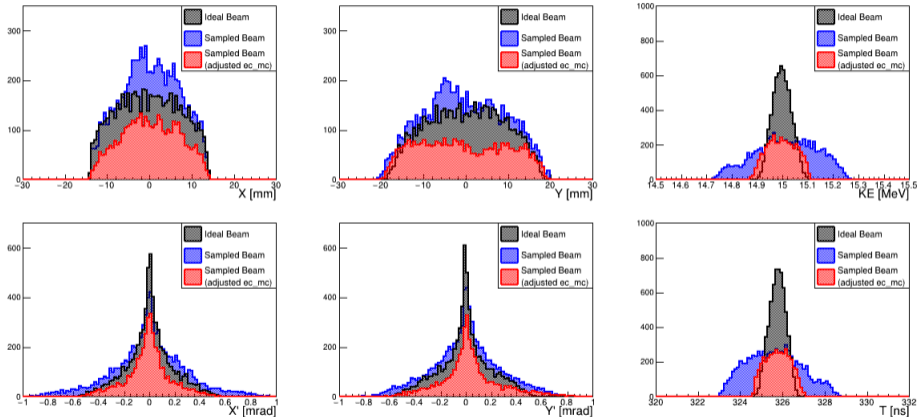
Ideal Beam w/ GL: Stage 1 End



Sampled Beam w/ GL: Stage 1 End



Beam Comparison w/ GL: At End Station



- Red plots are an adjustment to momentum collimator in arc from radius values: (xsize=12 mm, ysize=6 mm)
⇒ (xsize=12 mm, ysize=2.5 mm)