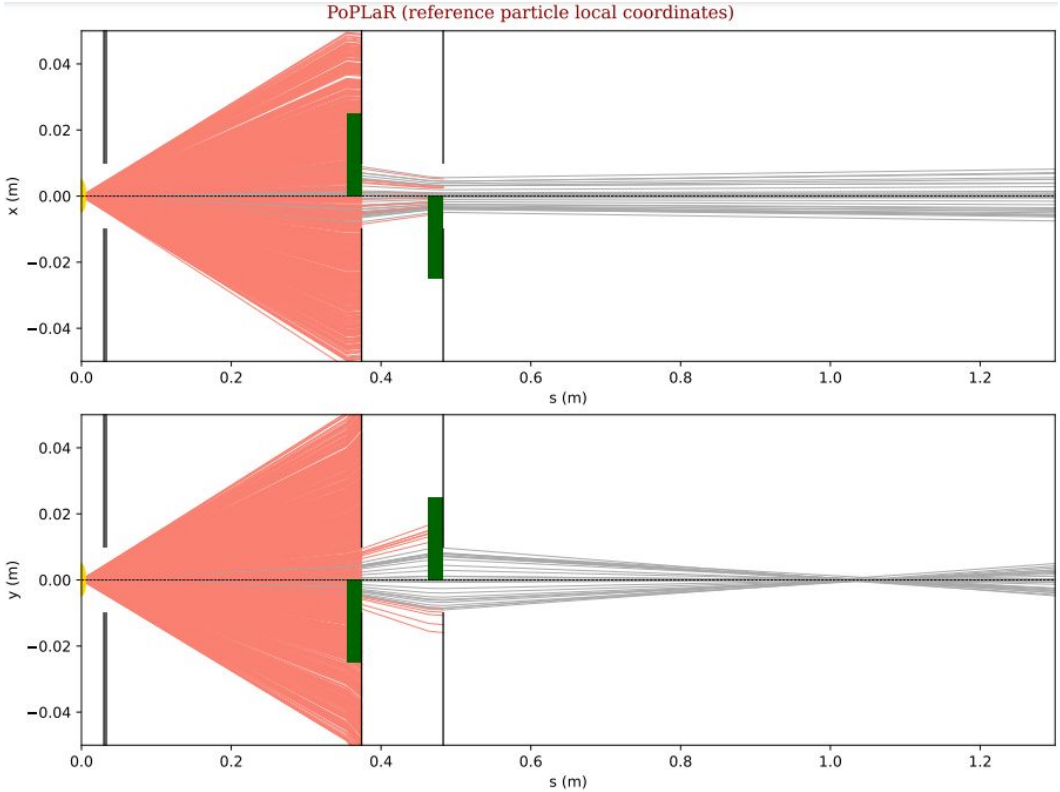
2 Quad Combinations

Optimised images for PoPLaR using SCAPA divergence

Josie McGarrigle

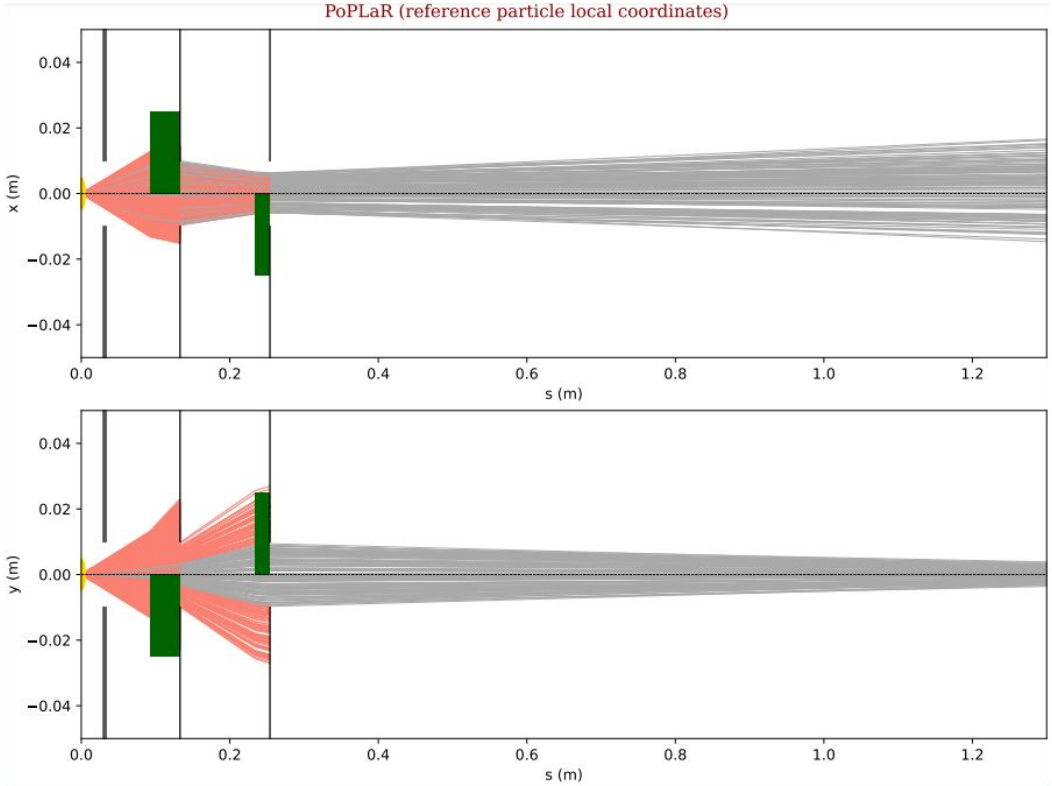
2cm quad 2cm quad



Transmission = 2.90%

Component	s (m)
Collimator 1	0.03
Quad 1	0.354
Quad 2	0.463

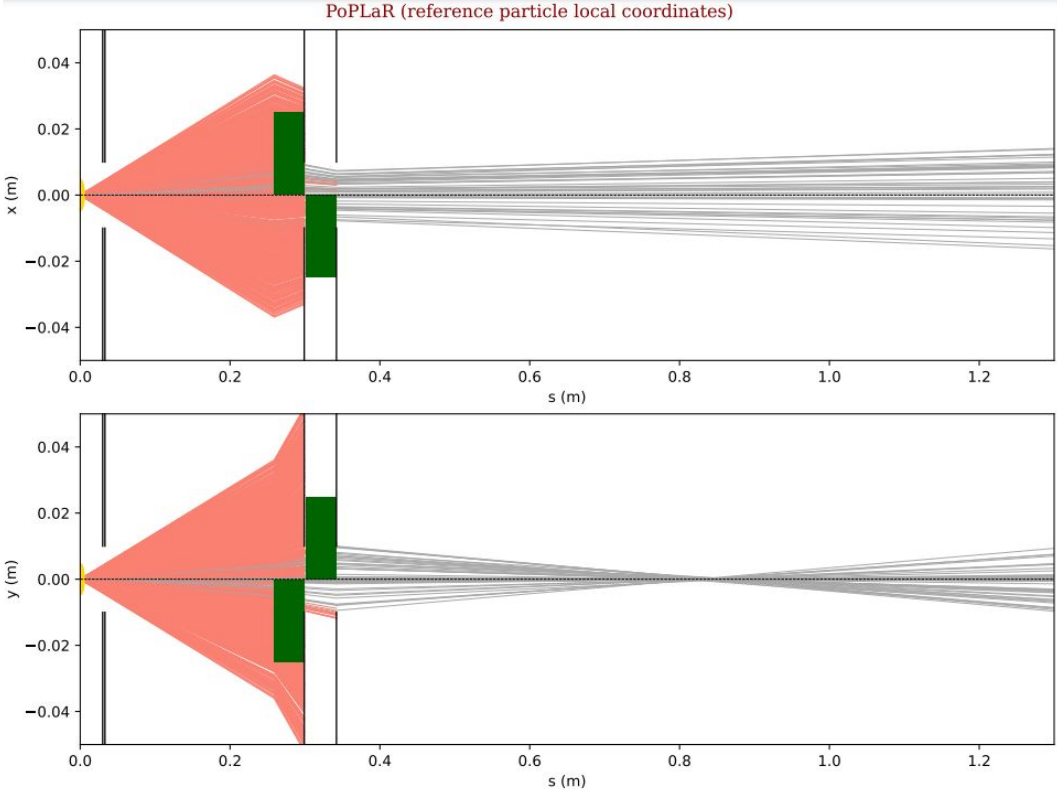
4cm quad 2cm quad



Transmission = 12.39%

Component	s (m)
Collimator 1	0.03
Quad 1	0.093
Quad 2	0.234

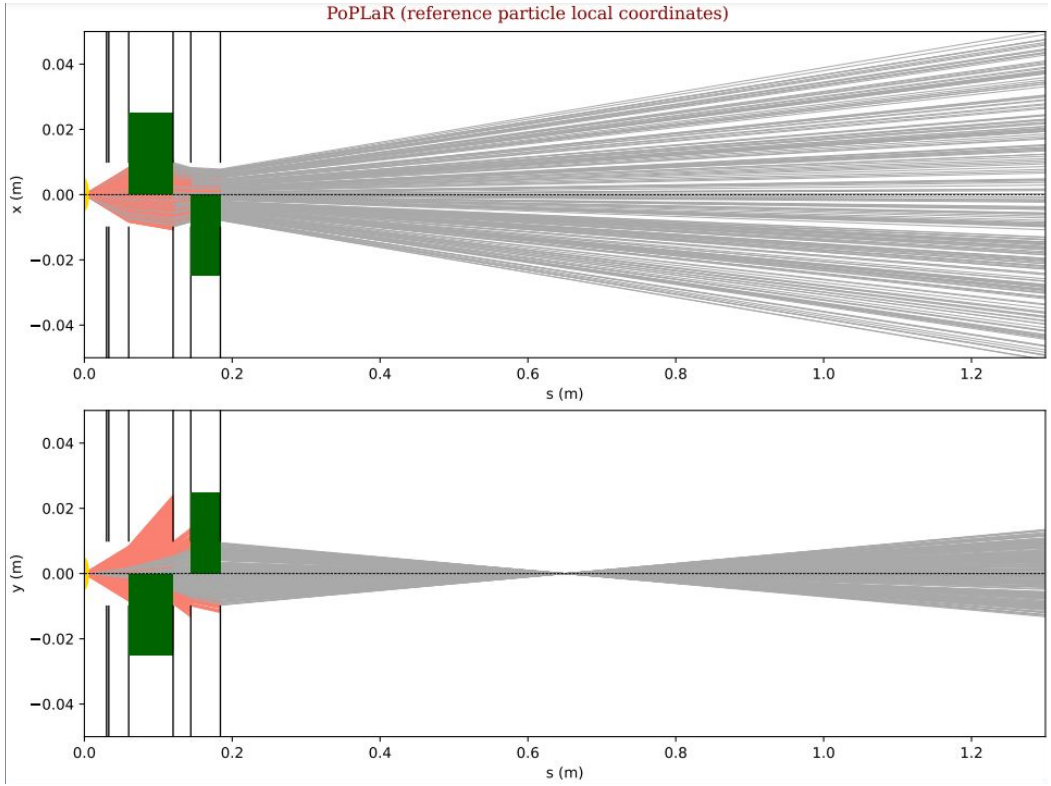
4cm quad 4cm quad



Transmission = 4.5%

Component	s (m)
Collimator 1	0.03
Quad 1	0.259
Quad 2	0.302

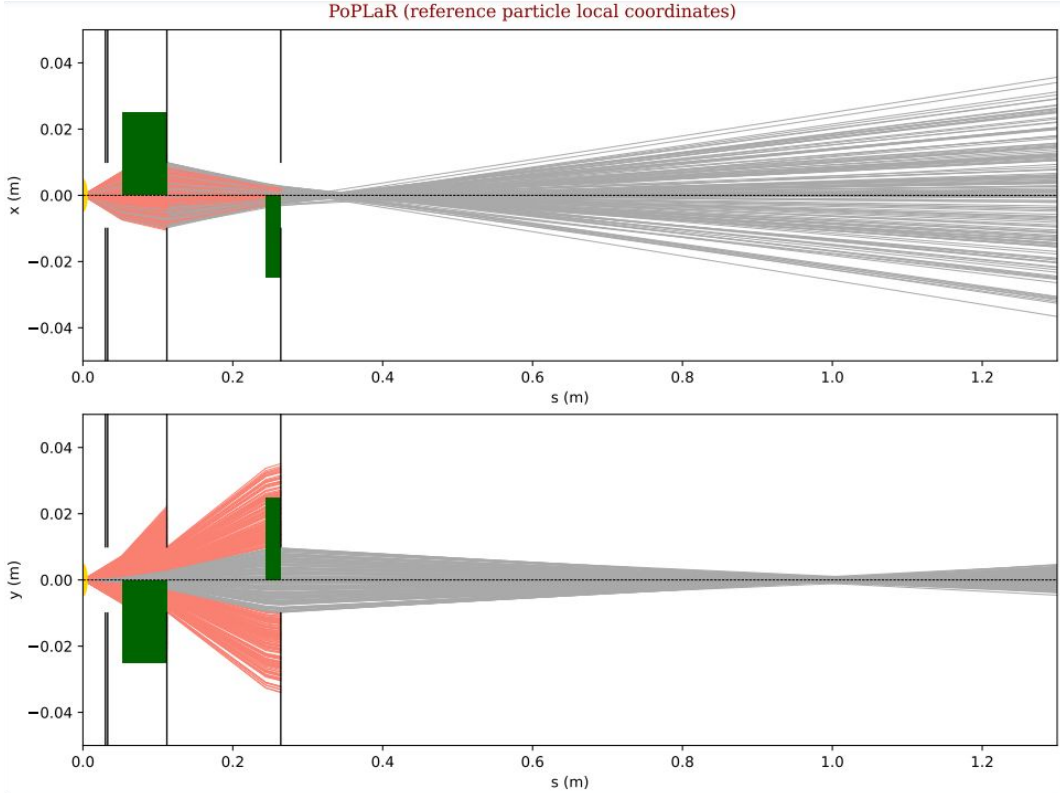
6cm quad 4cm quad



Transmission =25.17%

Component	s (m)
Collimator 1	0.03
Quad 1	0.06
Quad 2	0.144

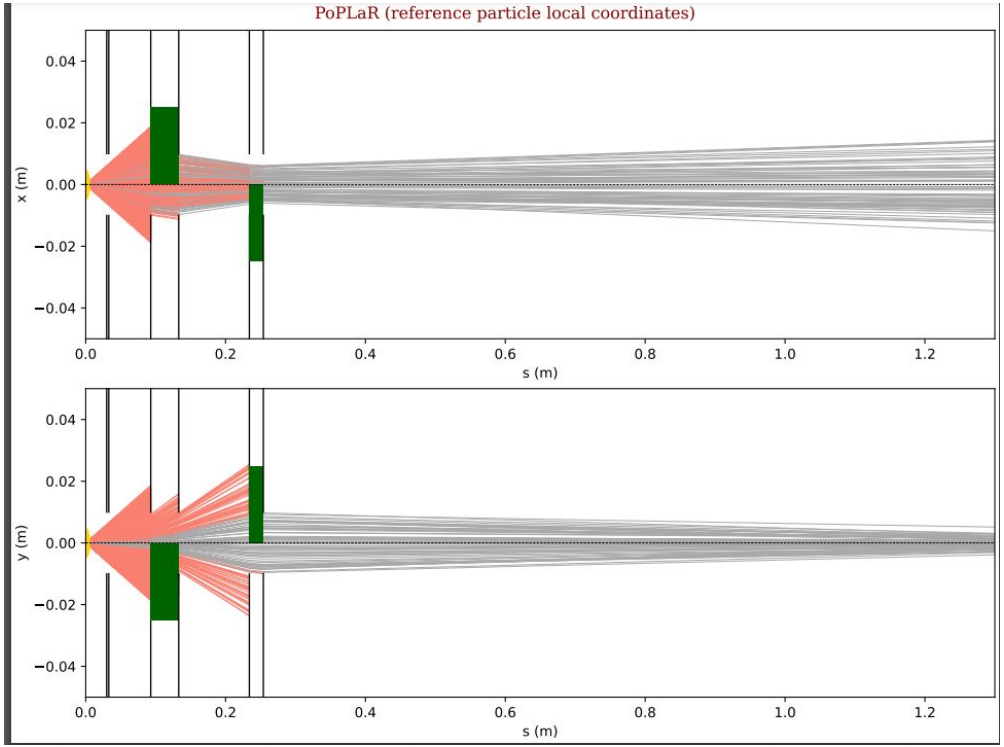
6cm quad 2cm quad

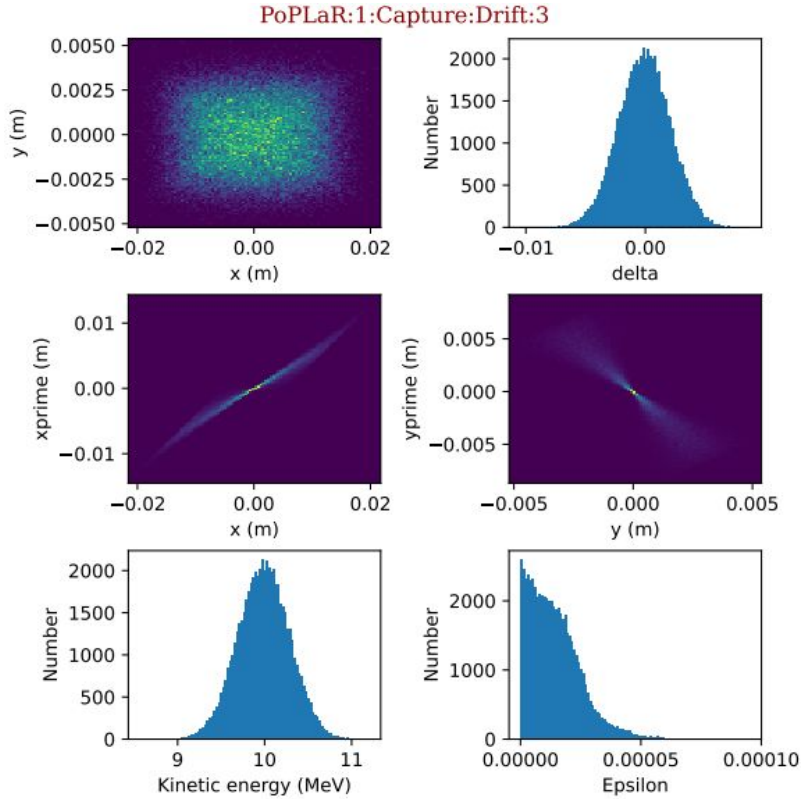


Transmission = 15.88%

Component	s (m)
Collimator 1	0.03
Quad 1	0.052
Quad 2	0.244

Possible best fit?: 4cm 2cm quad combination

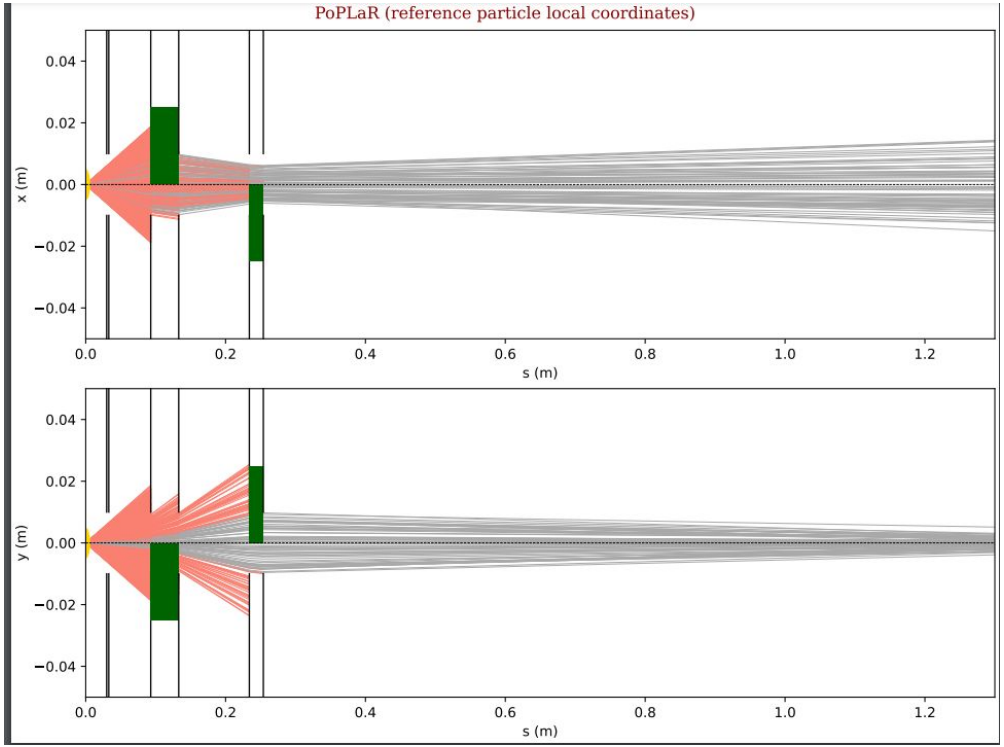




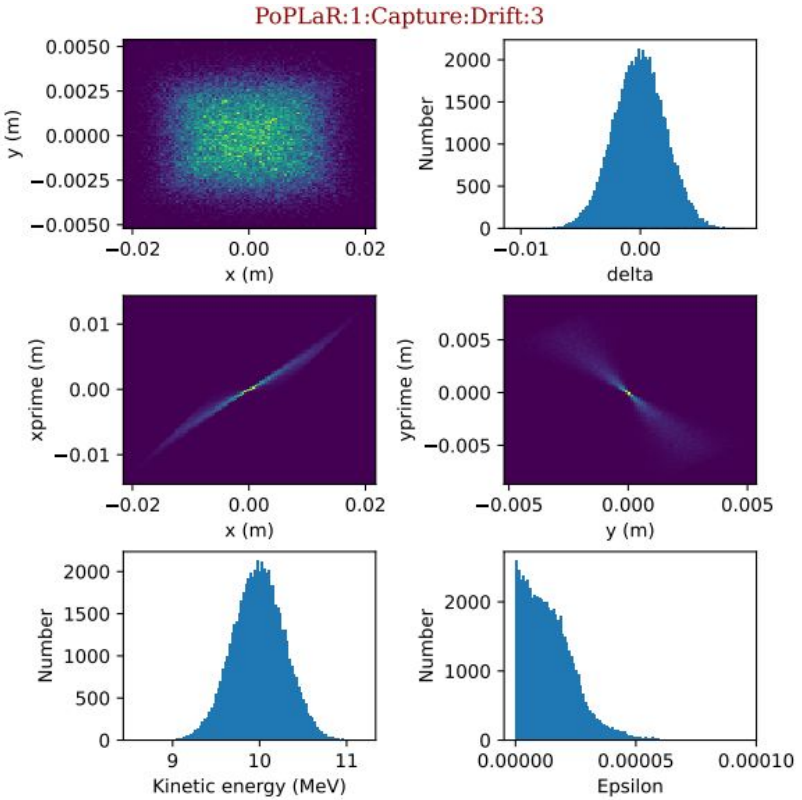
Preliminary sensitivity testing

With the 4cm 2cm combination

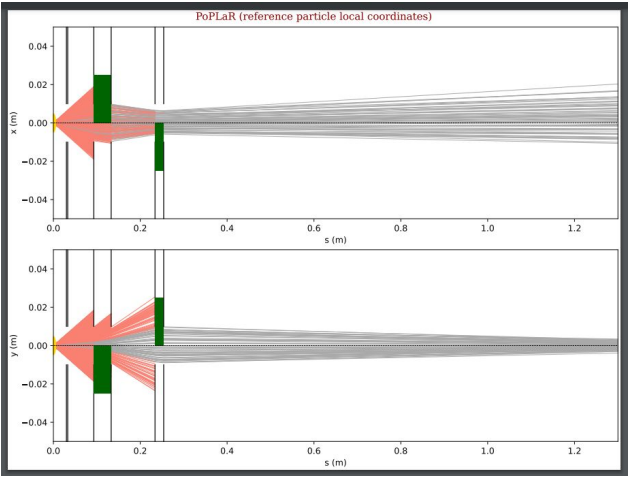
Reference: 4cm 2cm quad combination



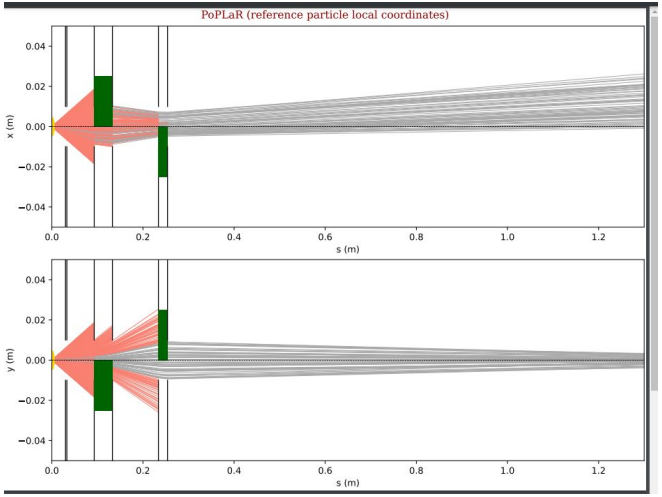
Transmission = 7.09%



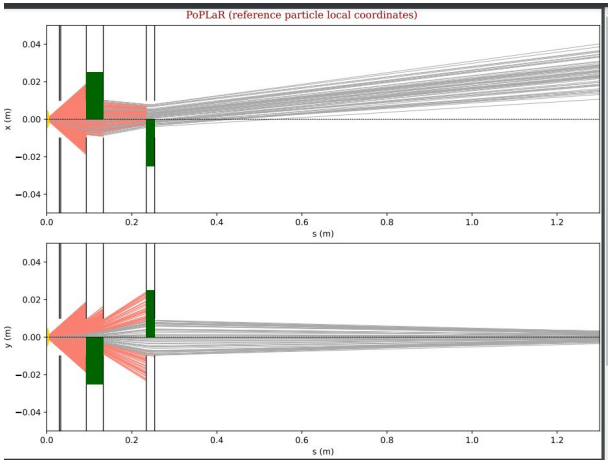
Quadrupole 1 shifted in x axis



0.1mm shift

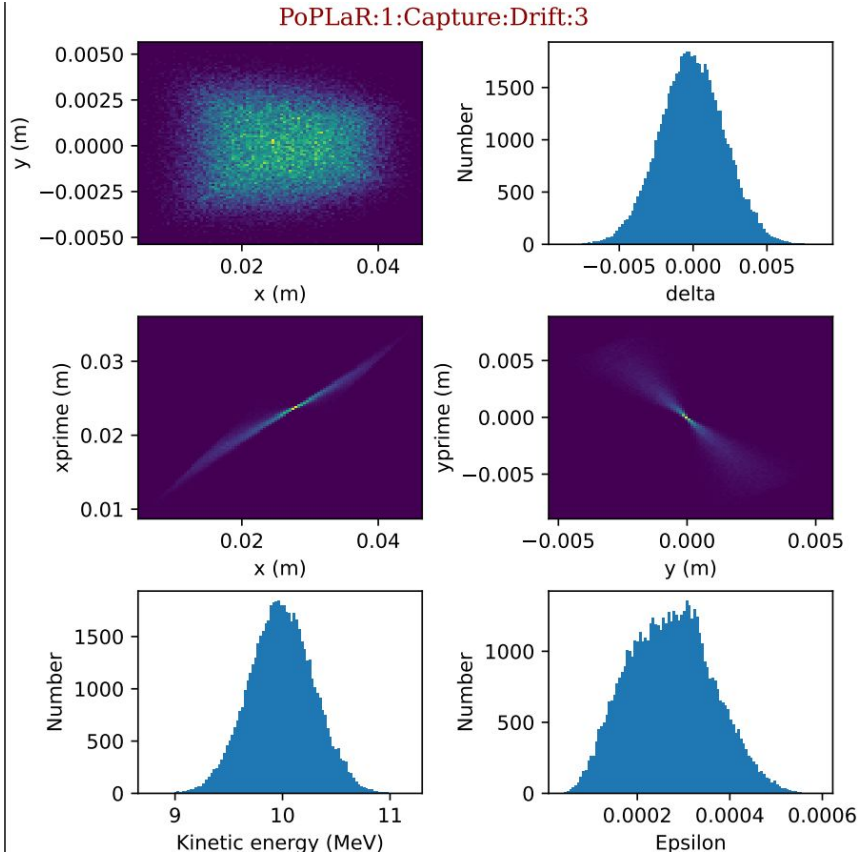


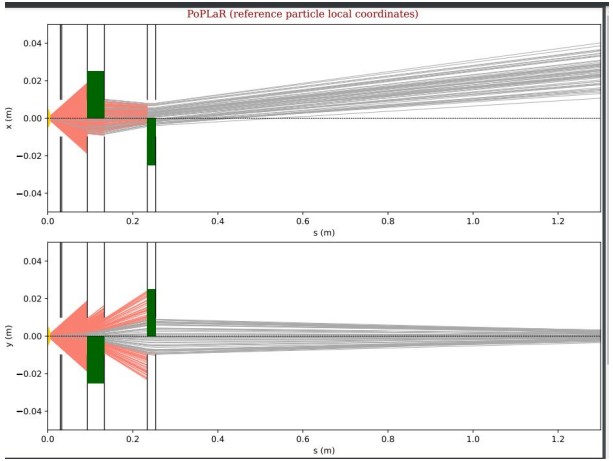
0.5mm shift



1mm shift

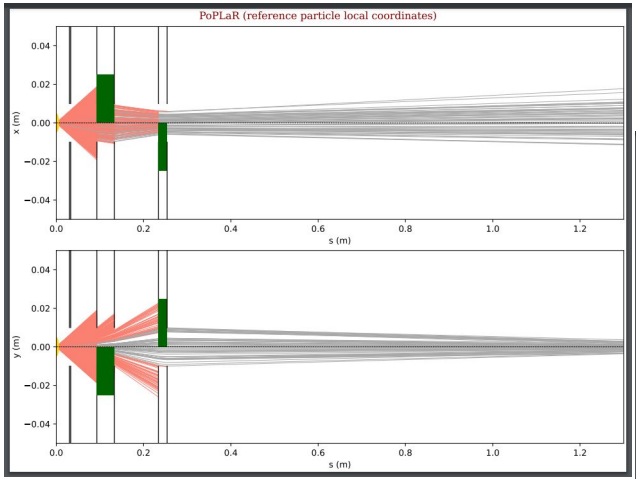
Quadrupole 1 shifted in x axis



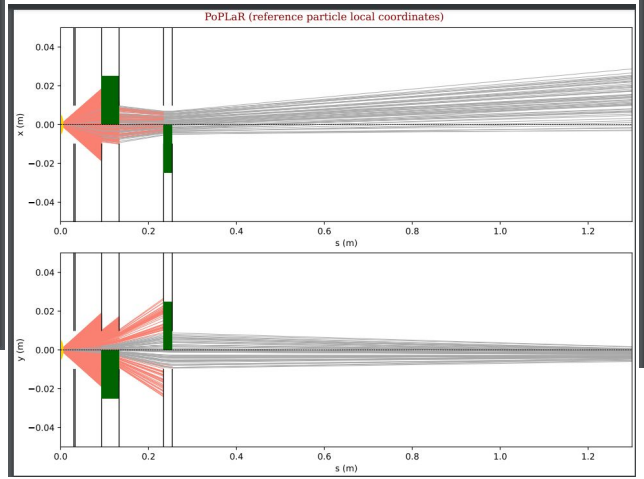


1mm shift
Transmission =6.69%

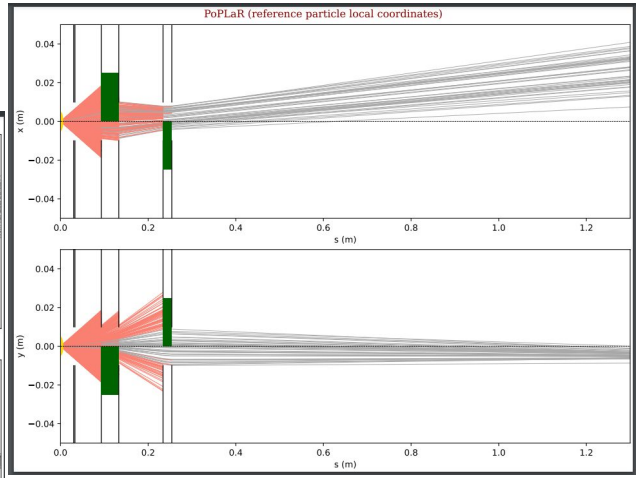
Quadrupole 1 shifted in x and y axis



0.1mm shift

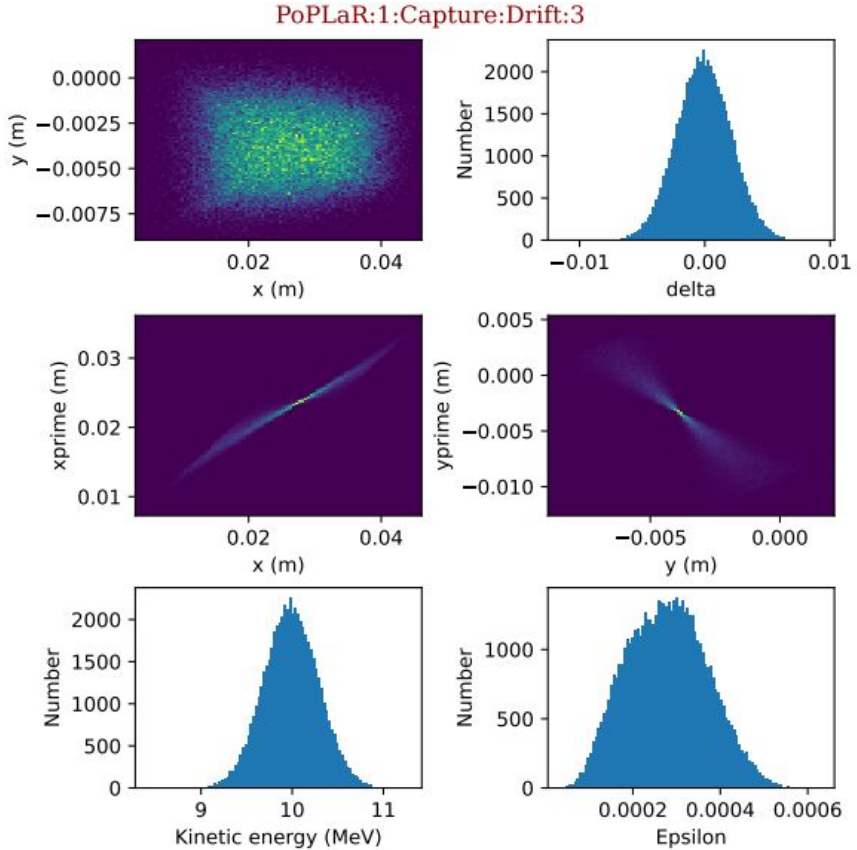


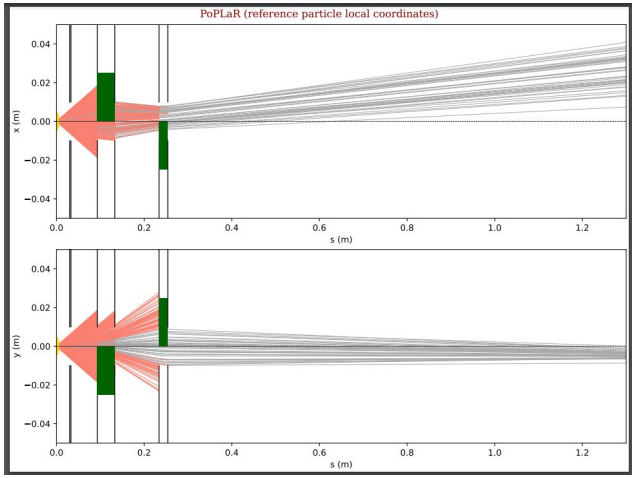
0.5mm shift



1mm shift

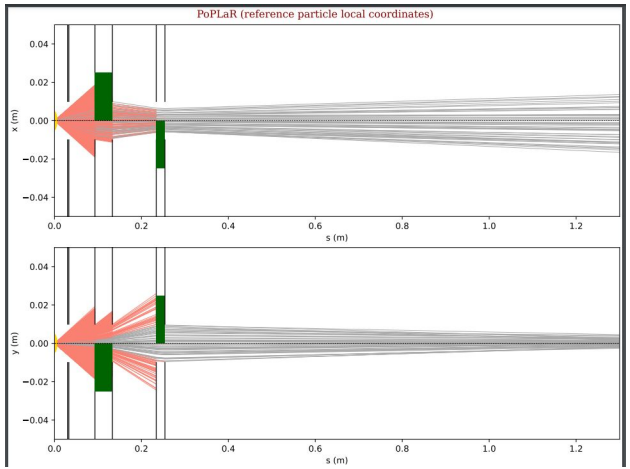
Quadrupole 1 shifted in x and y axis



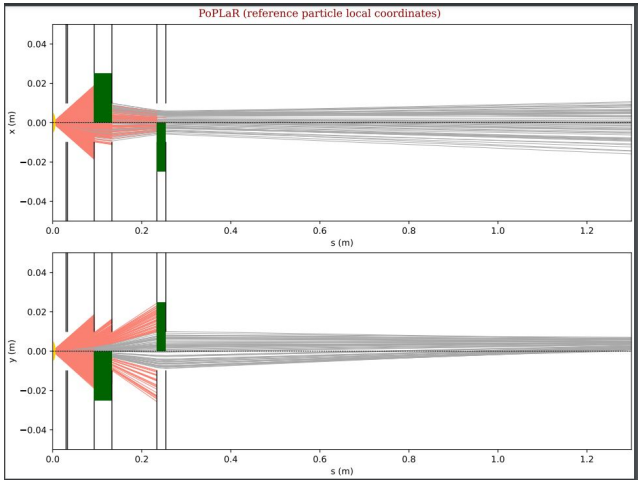


1mm shift
Transmission =6.29%

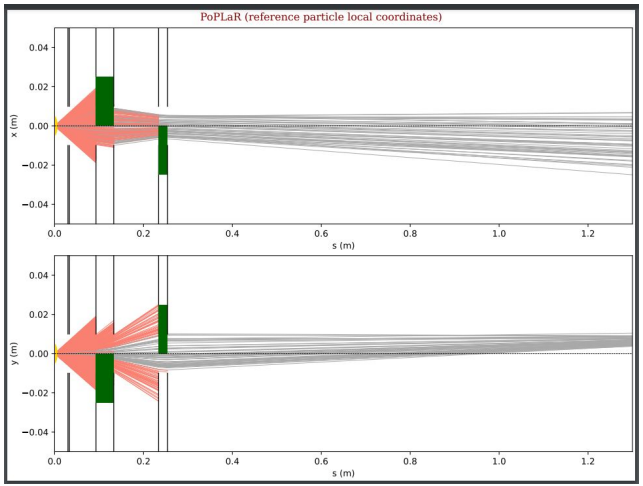
Quadrupole 2 shifted in x and y axis



0.1mm shift

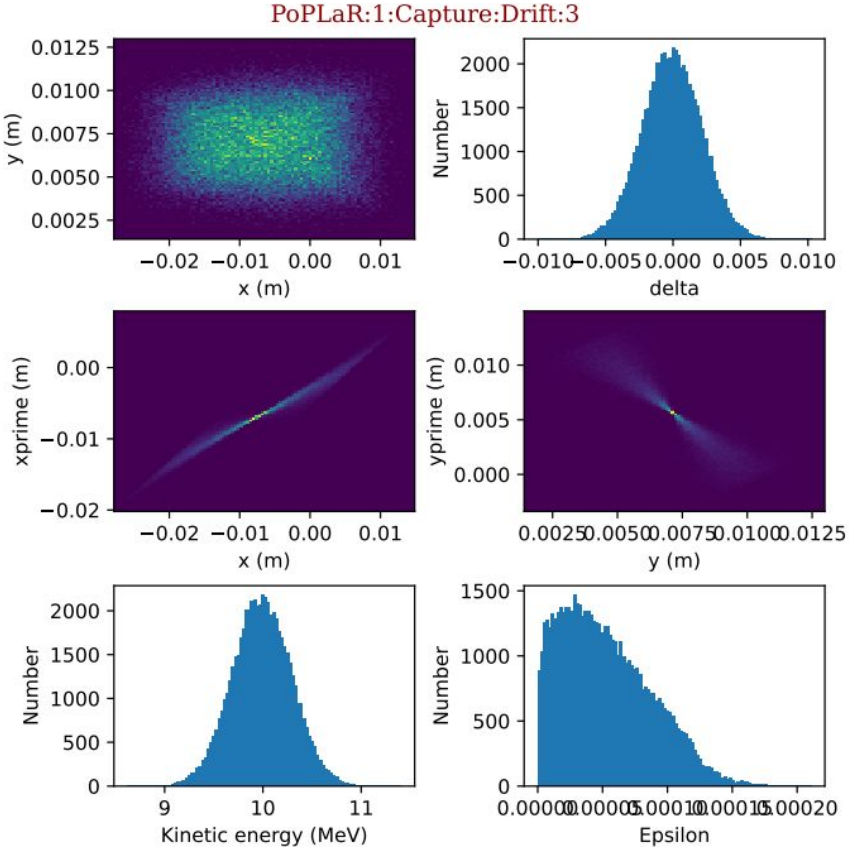


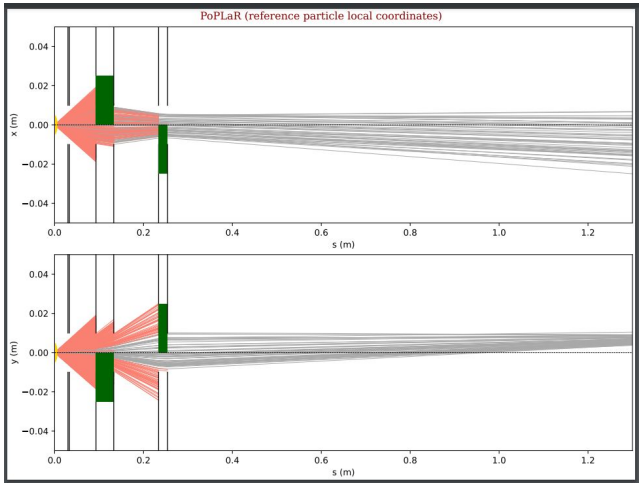
0.5mm shift



1mm shift

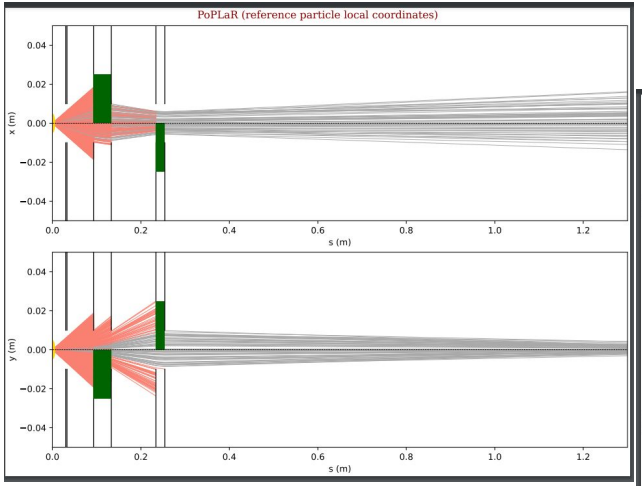
Quadrupole 2 shifted in x and y axis



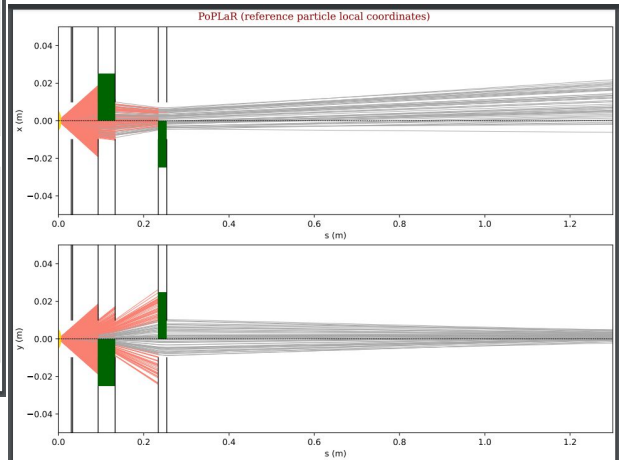


1mm shift

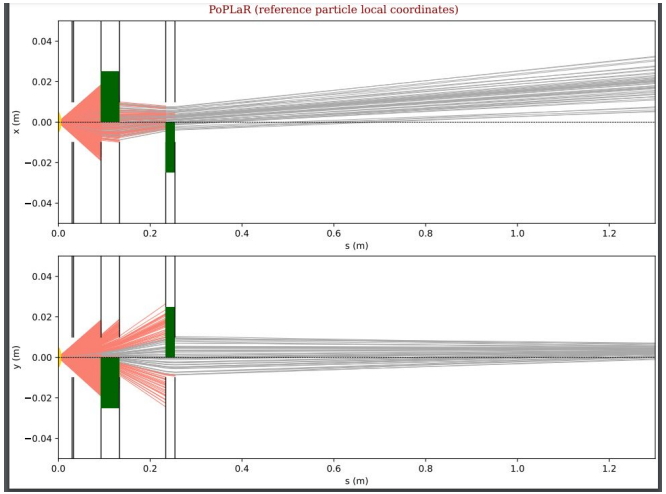
Quadrupole pair shifted in x and y axis



0.1mm shift

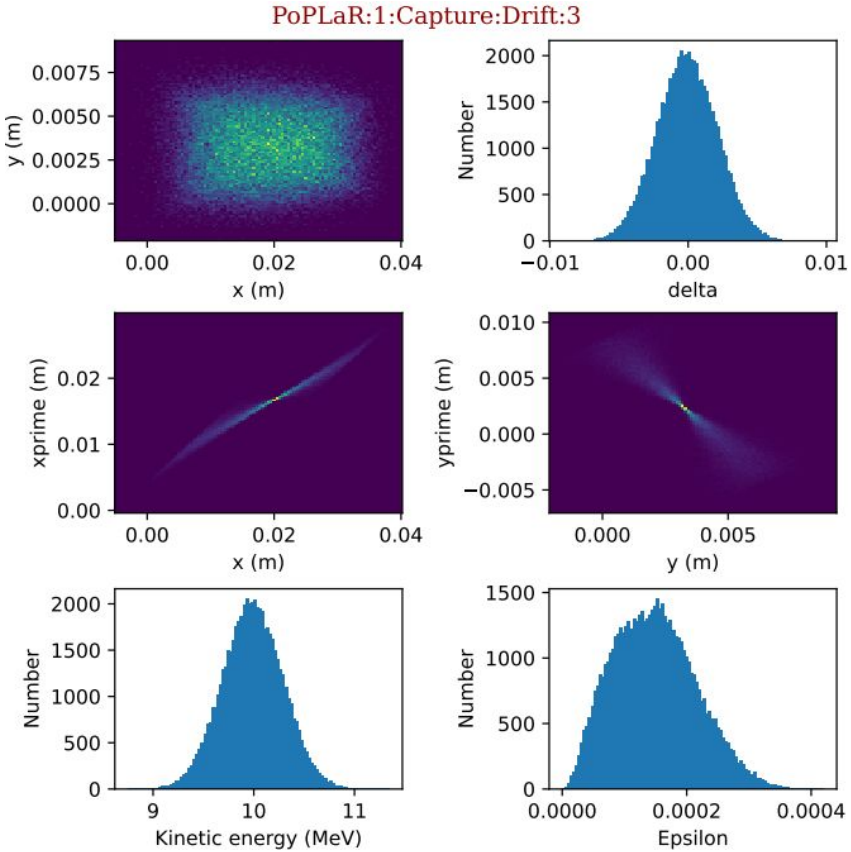


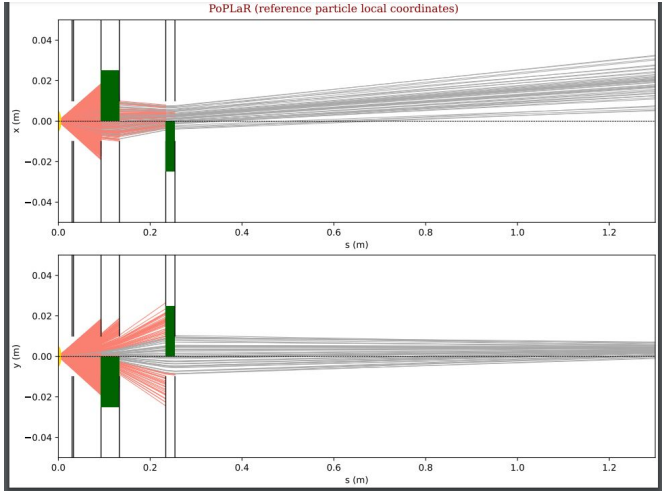
0.5mm shift



1mm shift

Quadrupole pair shifted in x and y axis





1mm shift