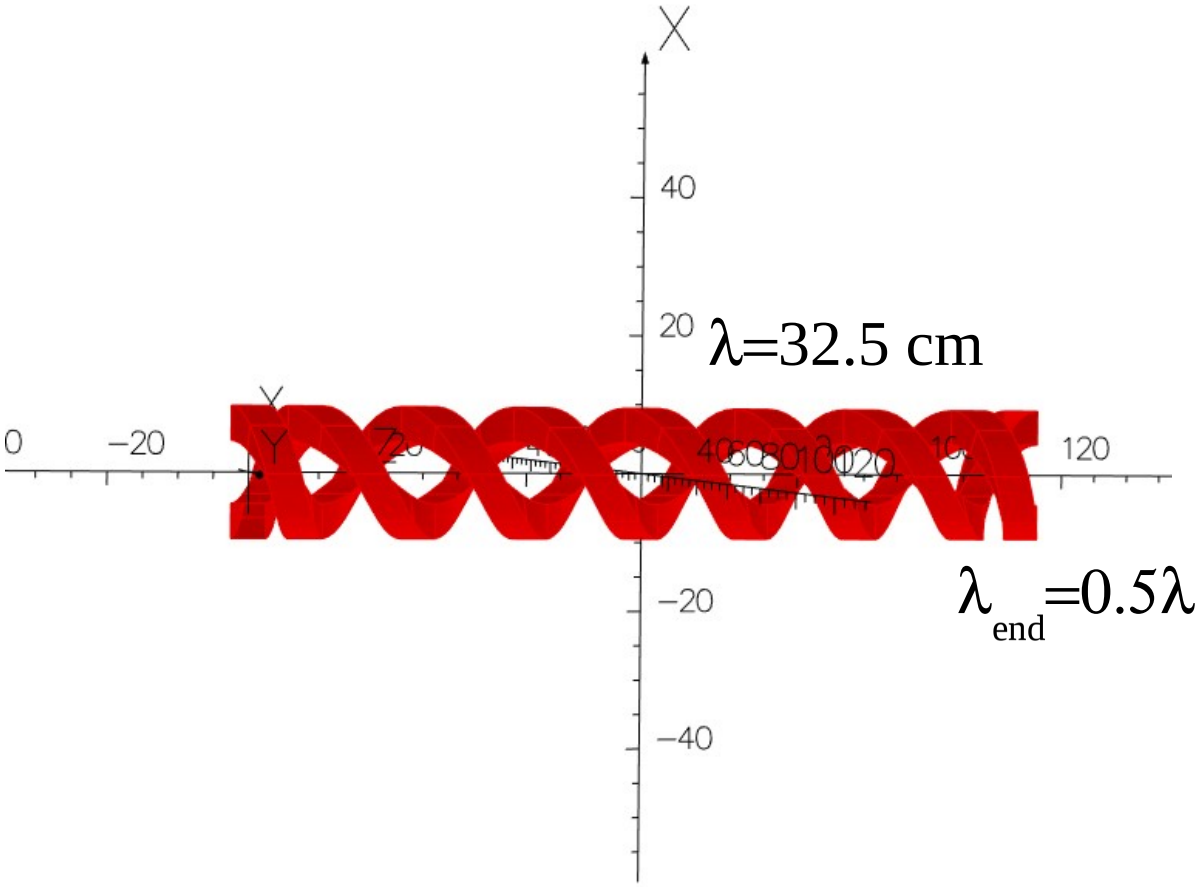
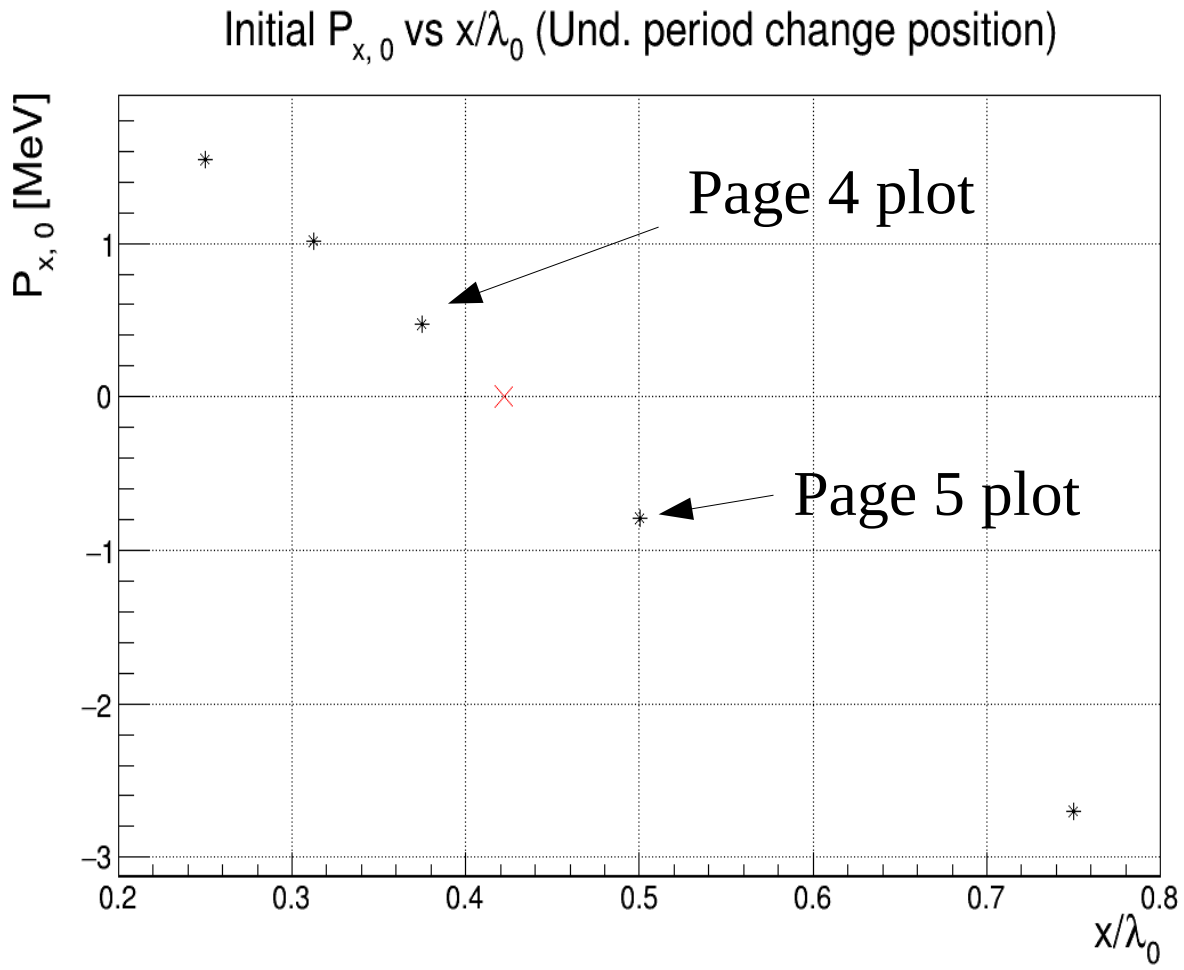
The status of the helical undulator field modeling


X
40
20
λ=32.5 cm
Y
0
−20
120
−20
−40
λ end =0.5λ


Initial $P_{x,0}$ vs x/λ_0 (Und. period change position)
$P_{x,0}$ [MeV]
x/λ_0
Page 4 plot
Page 5 plot
1
0
−1
−2
−3
0.2
0.3
0.4
0.5
0.6
0.7
0.8

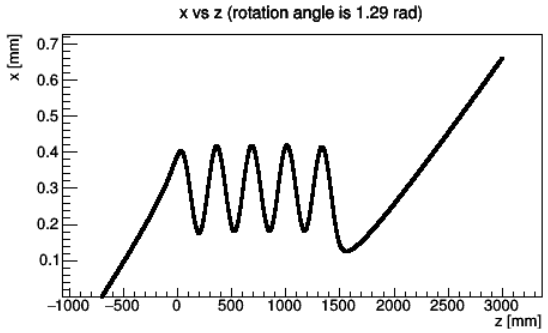
$x = 3/8\lambda$

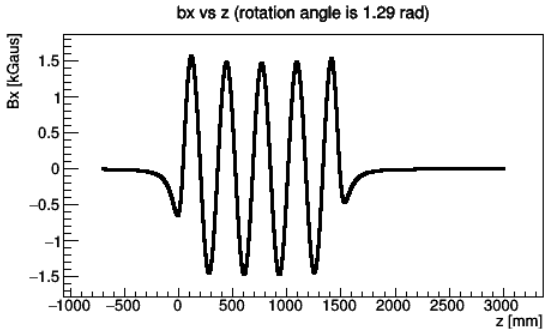
$P_{x,0} = 0.47$ MeV

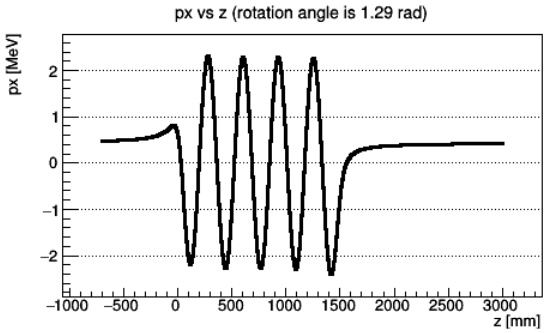
$\lambda_0 = 32.5$ cm

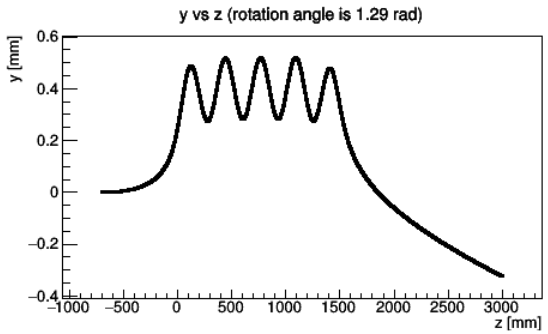
$\lambda_{end} = 0.5*\lambda$

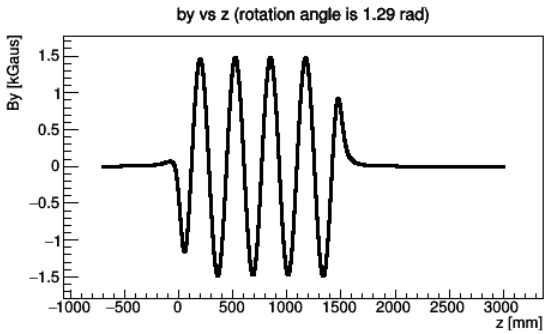
N = 4 turns

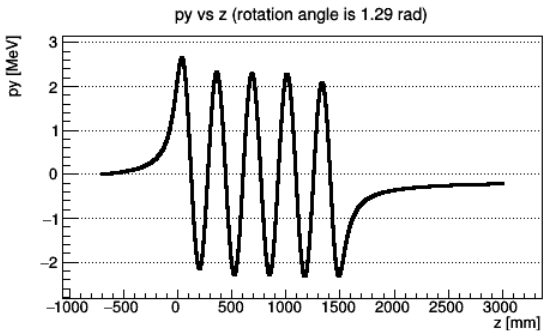


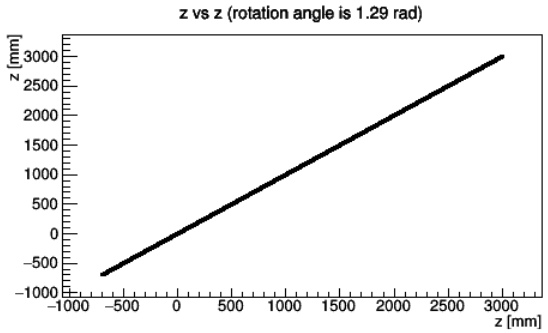


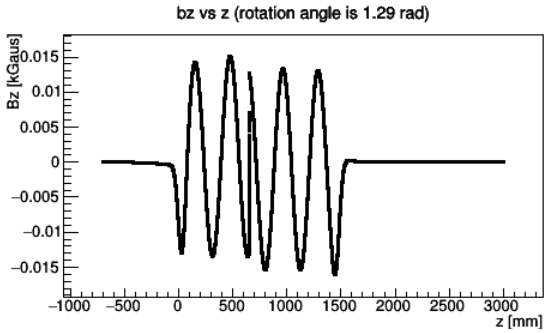


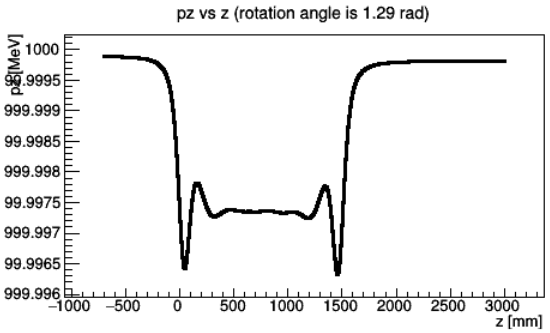












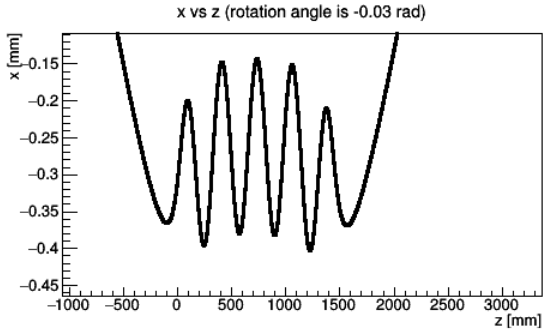
$x = 4/8\lambda$

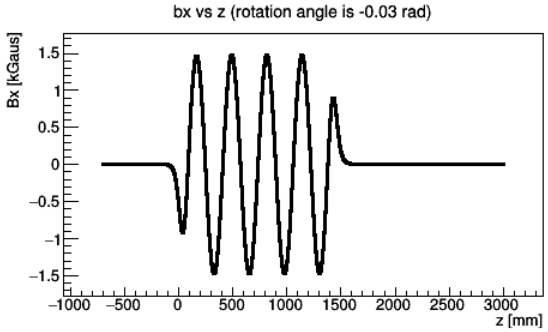
$P_{x,0} = -0.78$ MeV

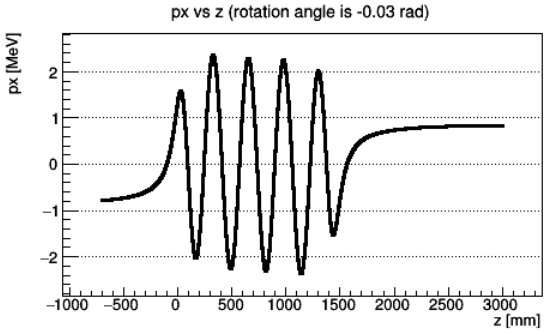
$\lambda_0 = 32.5$ cm

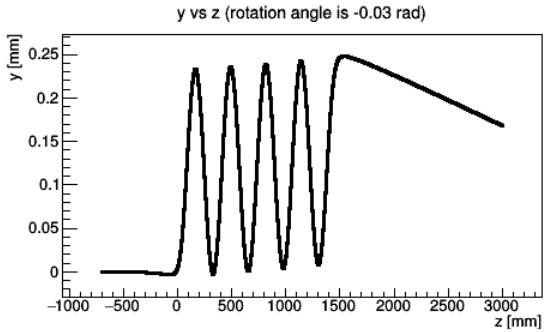
$\lambda_{end} = 0.5\lambda$

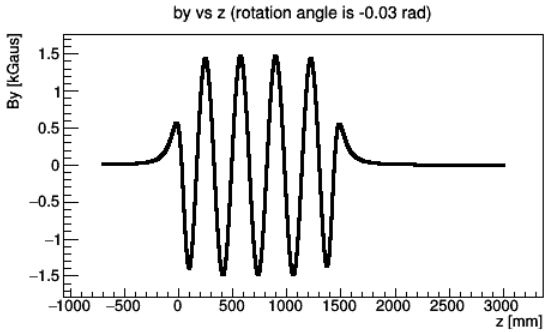
N = 4 turns

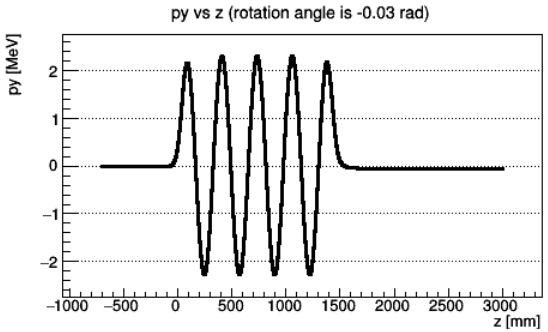


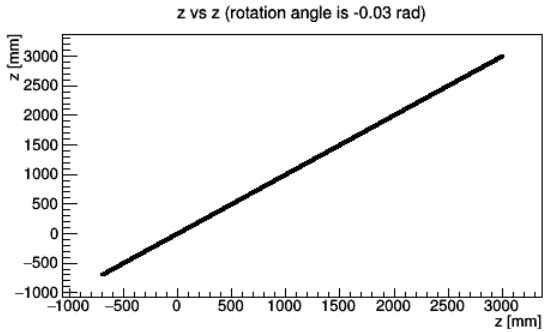


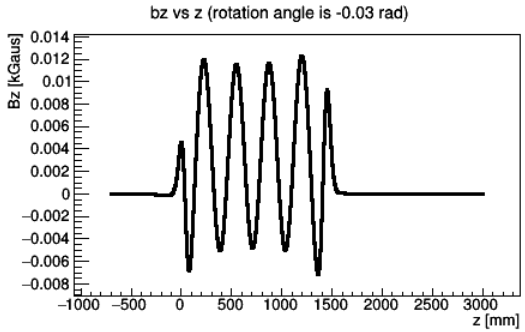


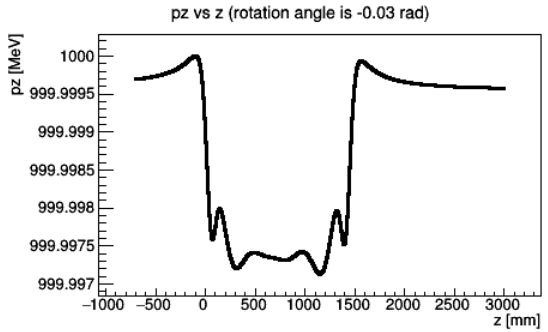


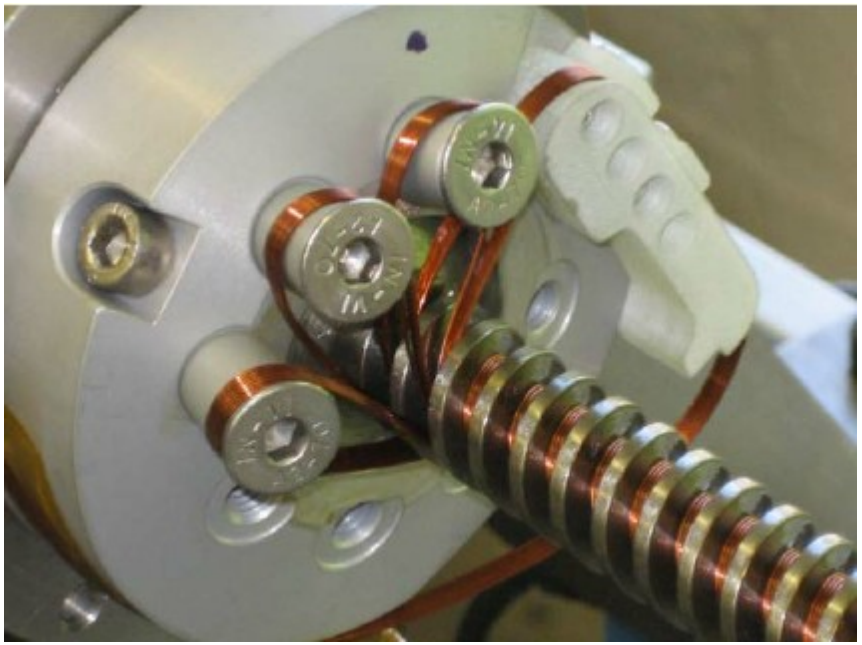


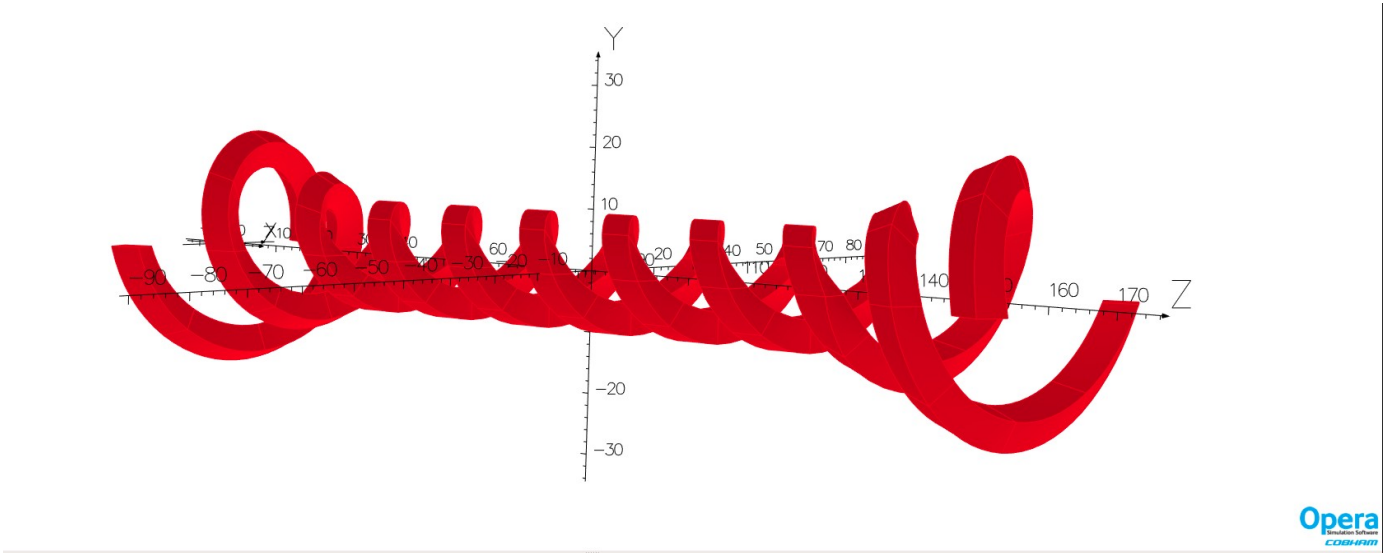


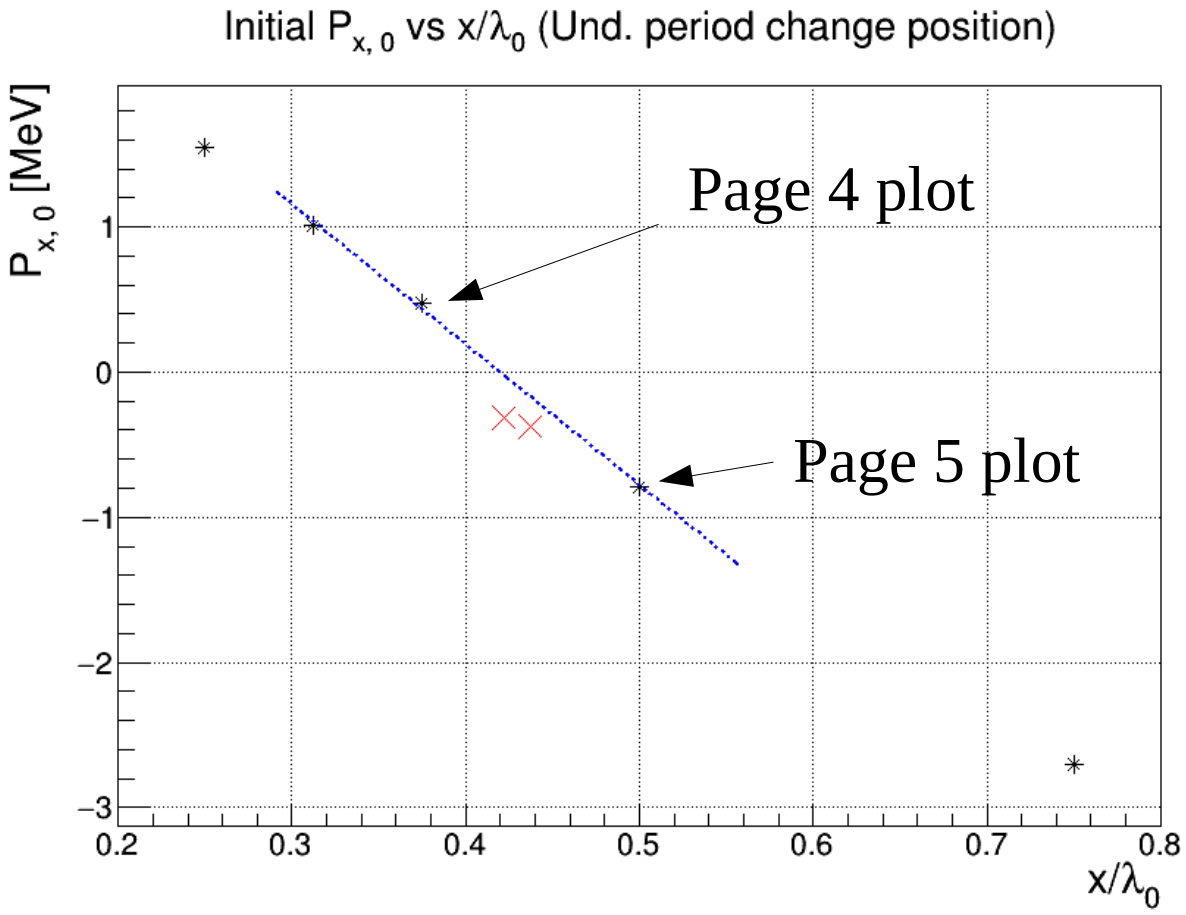









Y
30
20
10
−20
−30
Z
160
170
Opera



The slide is added after the group meeting (on Aug-28)

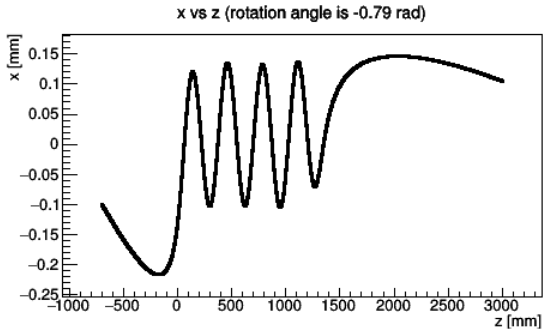
$x = 27/64\lambda$

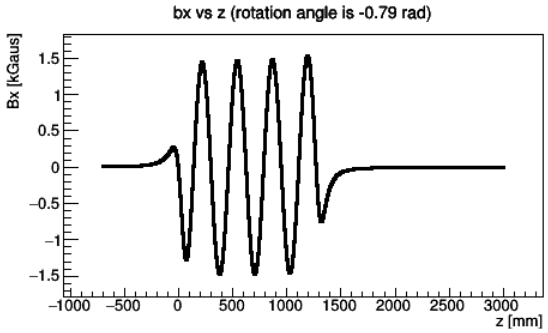
$P_{x,0} = -0.31$ MeV

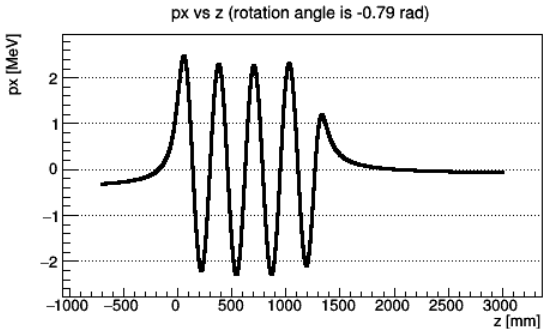
$\lambda_0 = 32.5$ cm

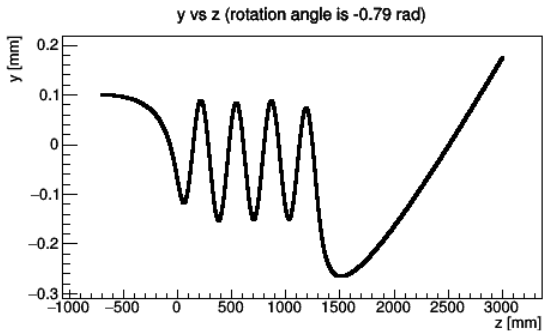
$\lambda_{end} = 0.5*\lambda$

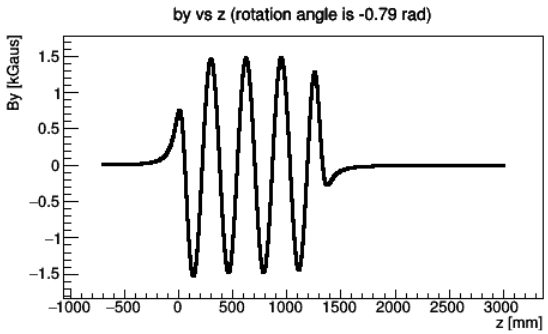
N = 4 turns

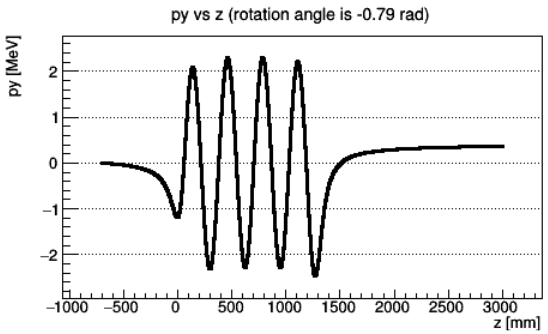


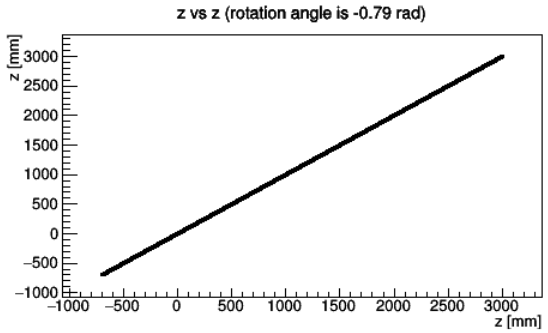


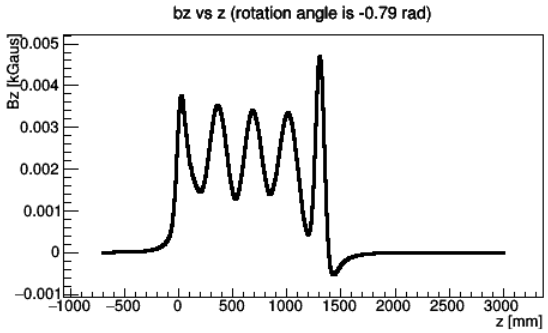


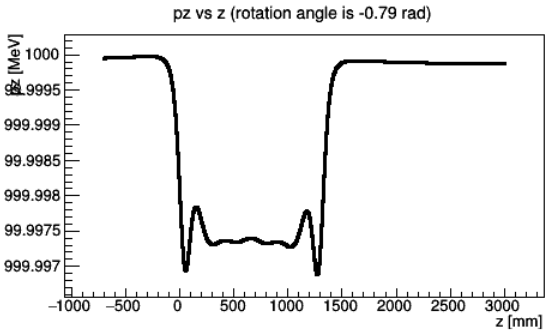












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