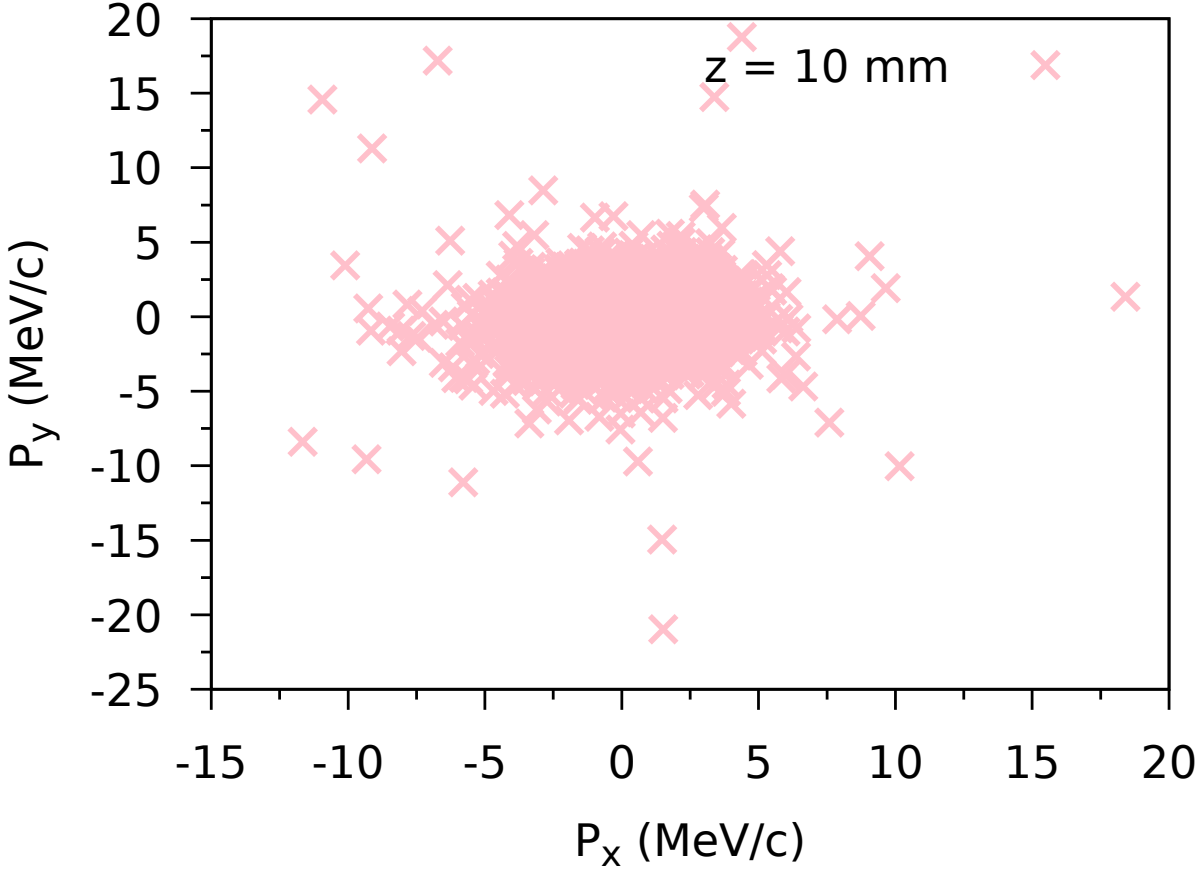
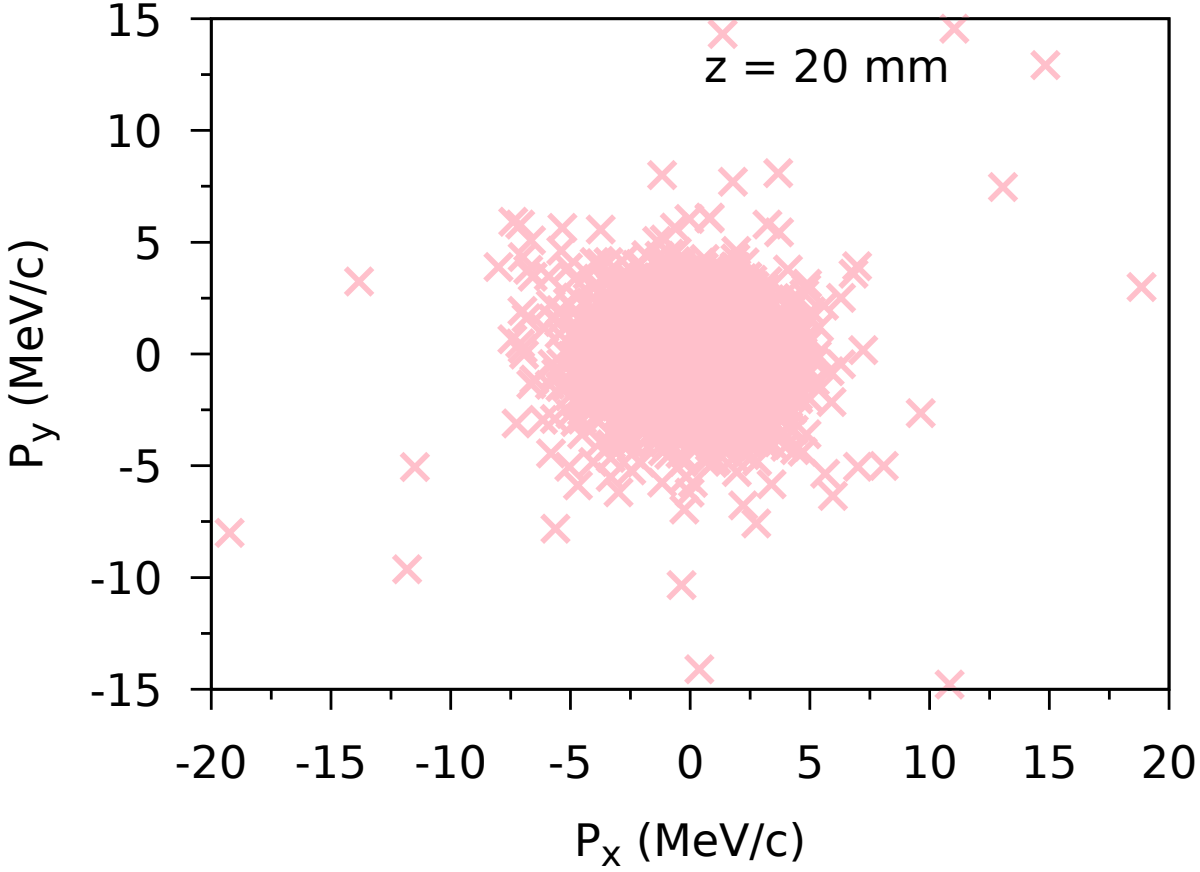
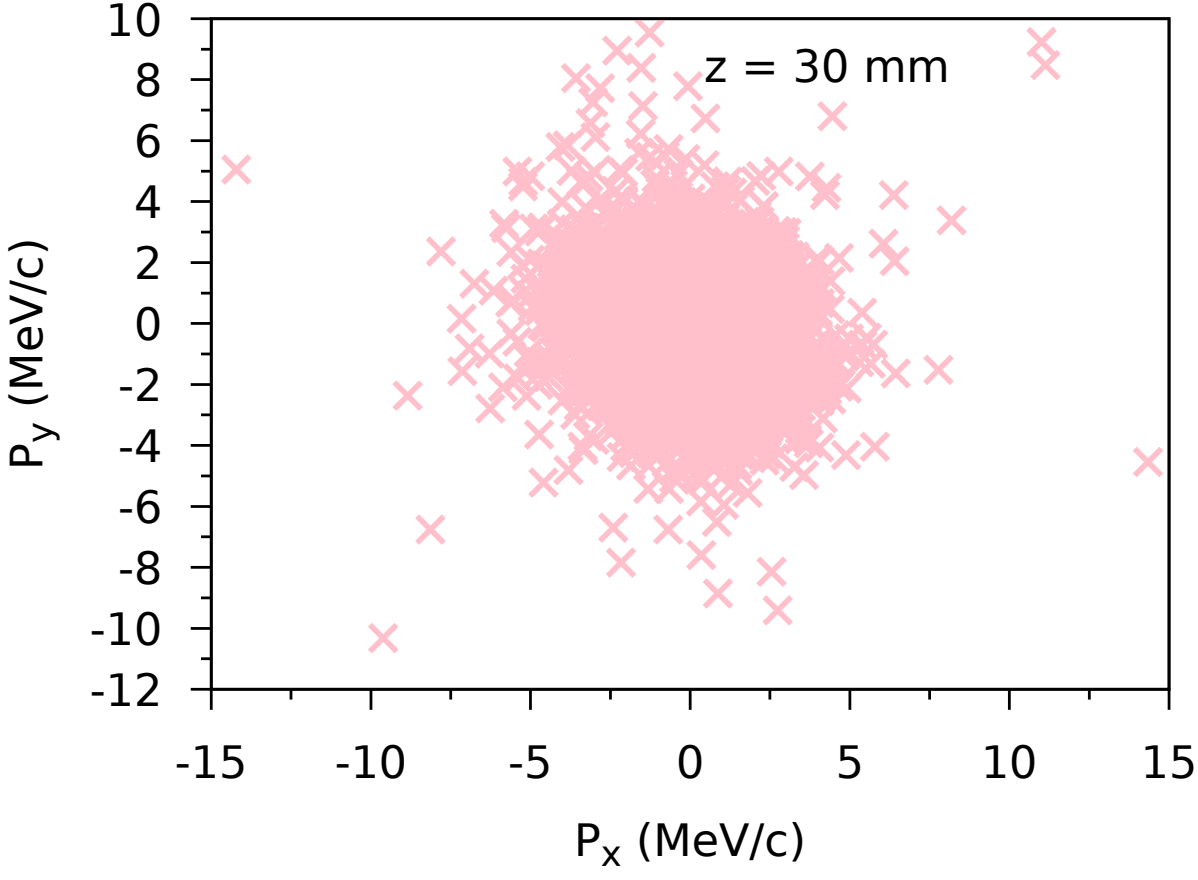
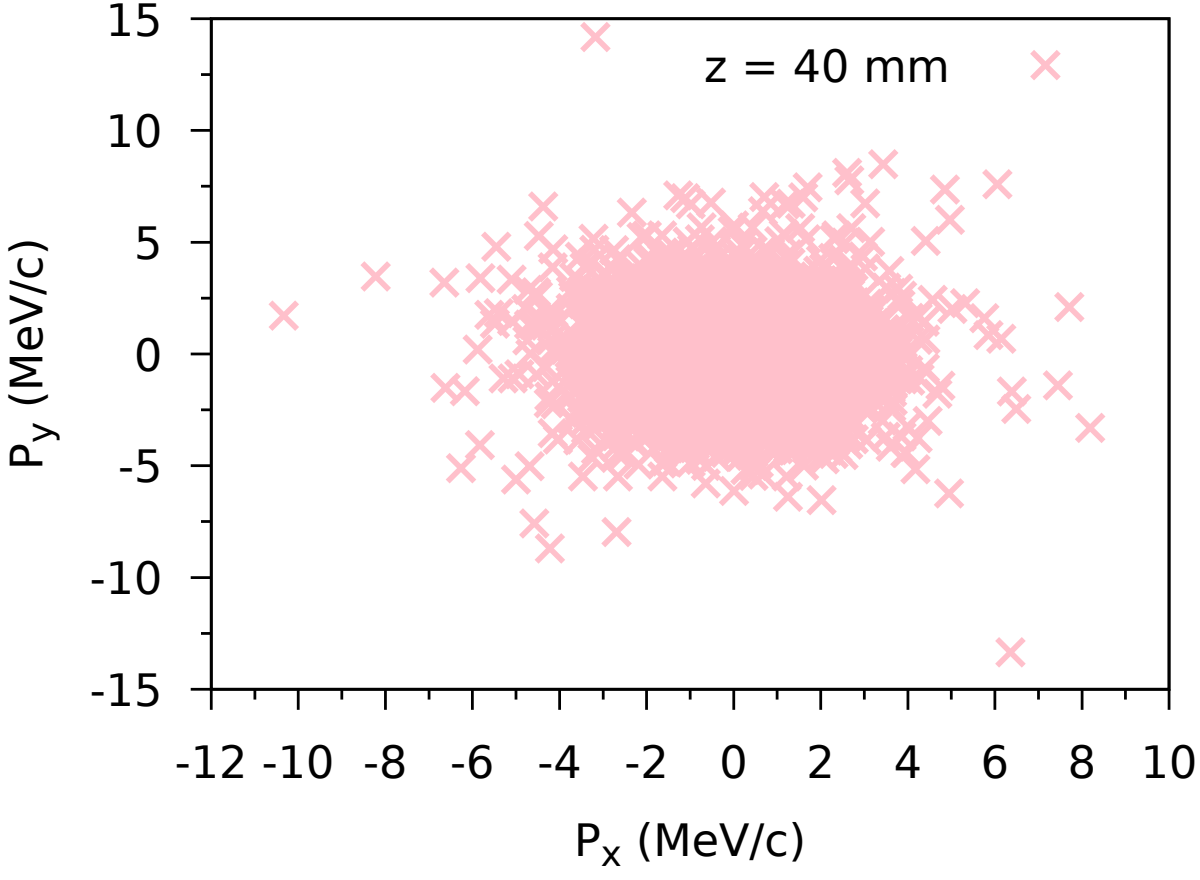
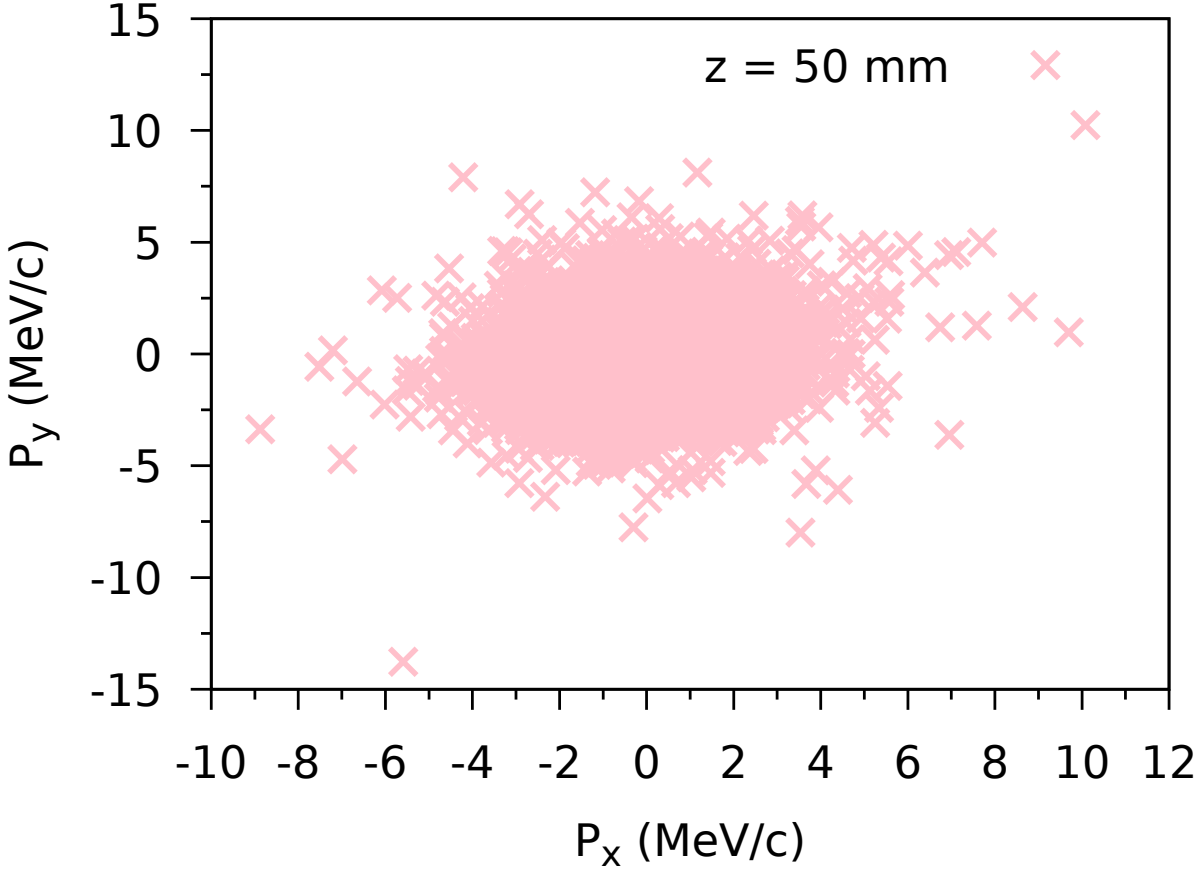
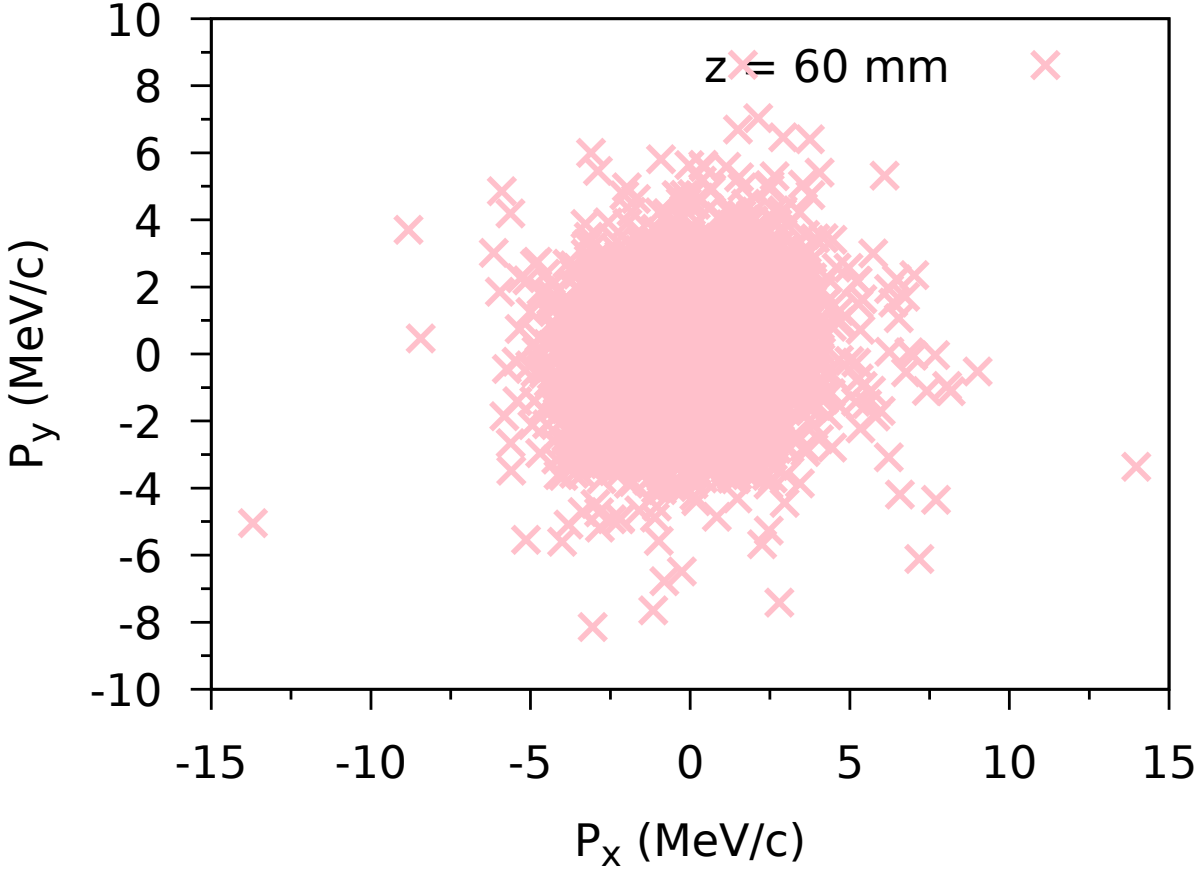

z = 10 mm
20
15
10
5
0
-5
-10
-15
-20
-25
-15
-10
-5
0
5
10
15
20
P_y (MeV/c)
P_x (MeV/c)

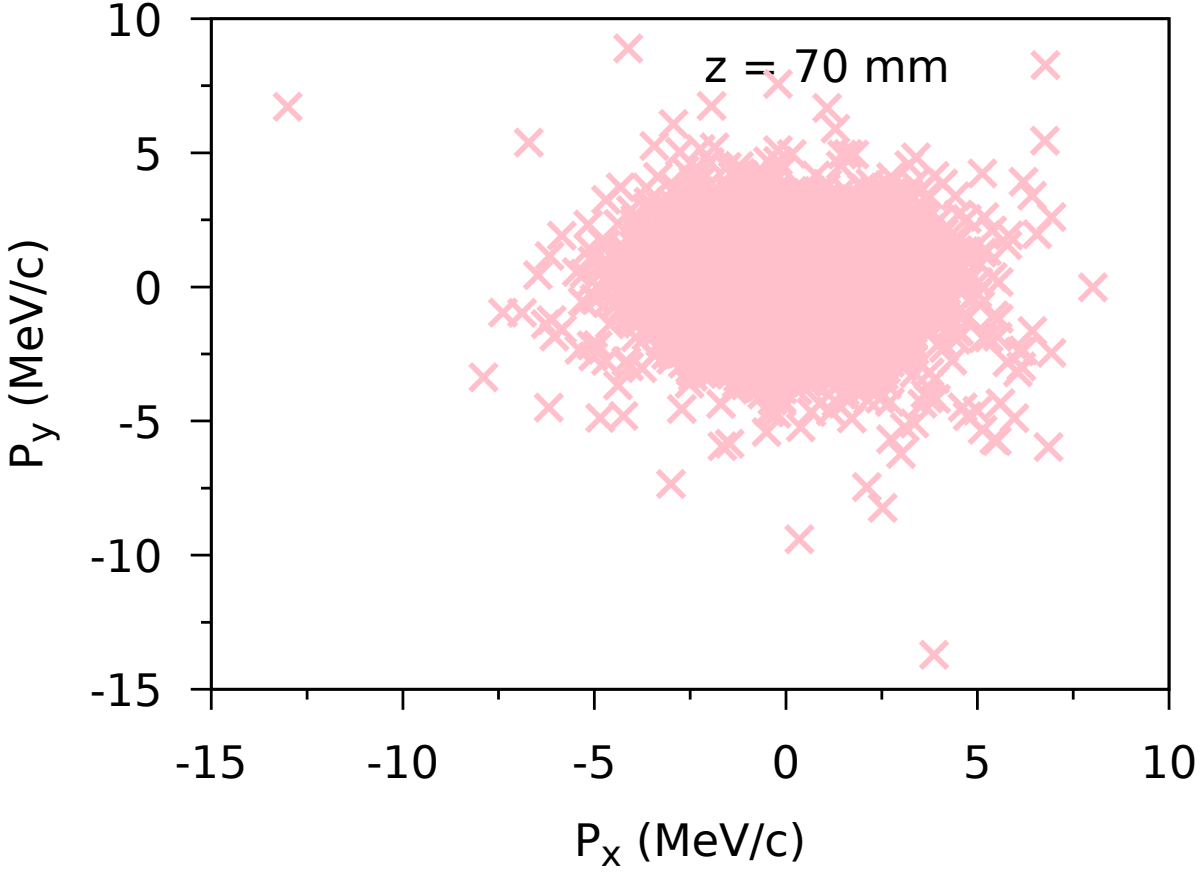

z = 20 mm
15
10
5
0
-5
-10
-15
-20
-15
-10
-5
0
5
10
15
20
P_y (MeV/c)
P_x (MeV/c)

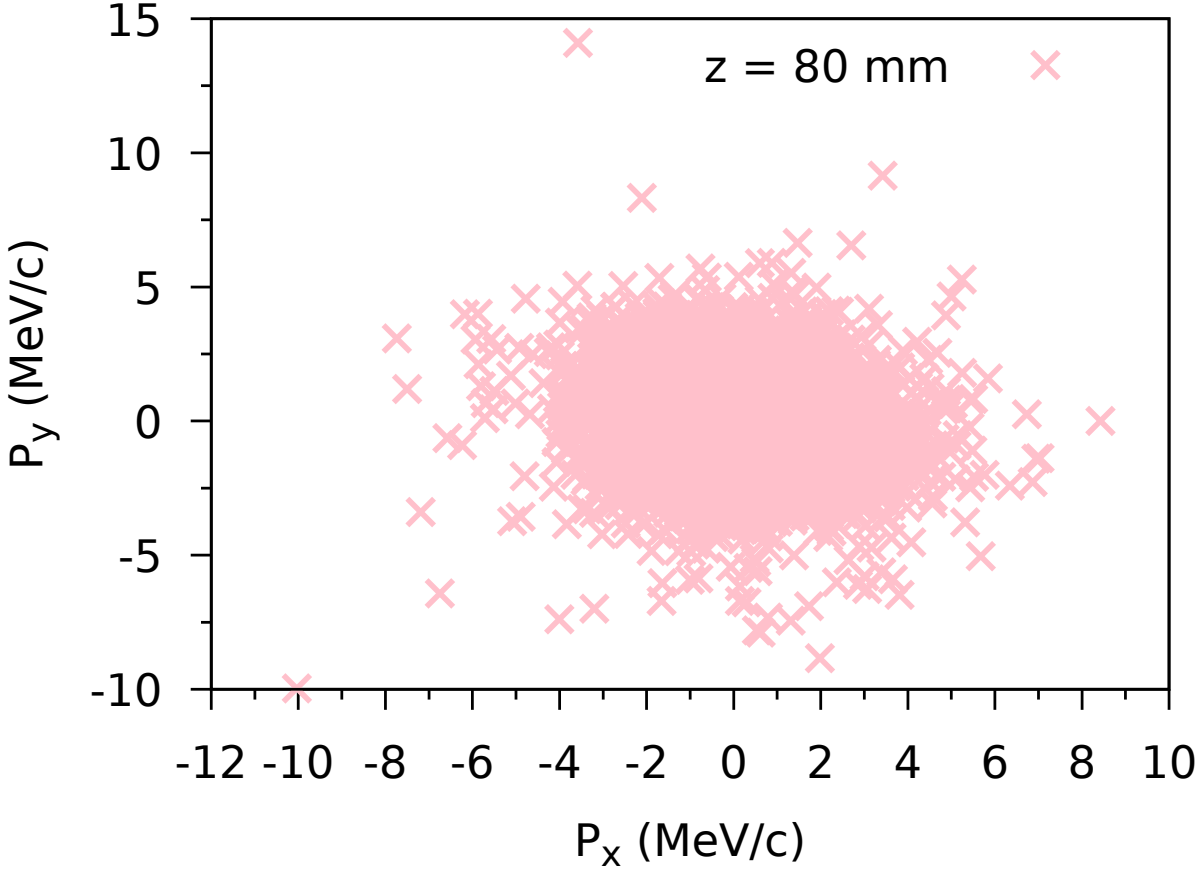

z = 30 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-15
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

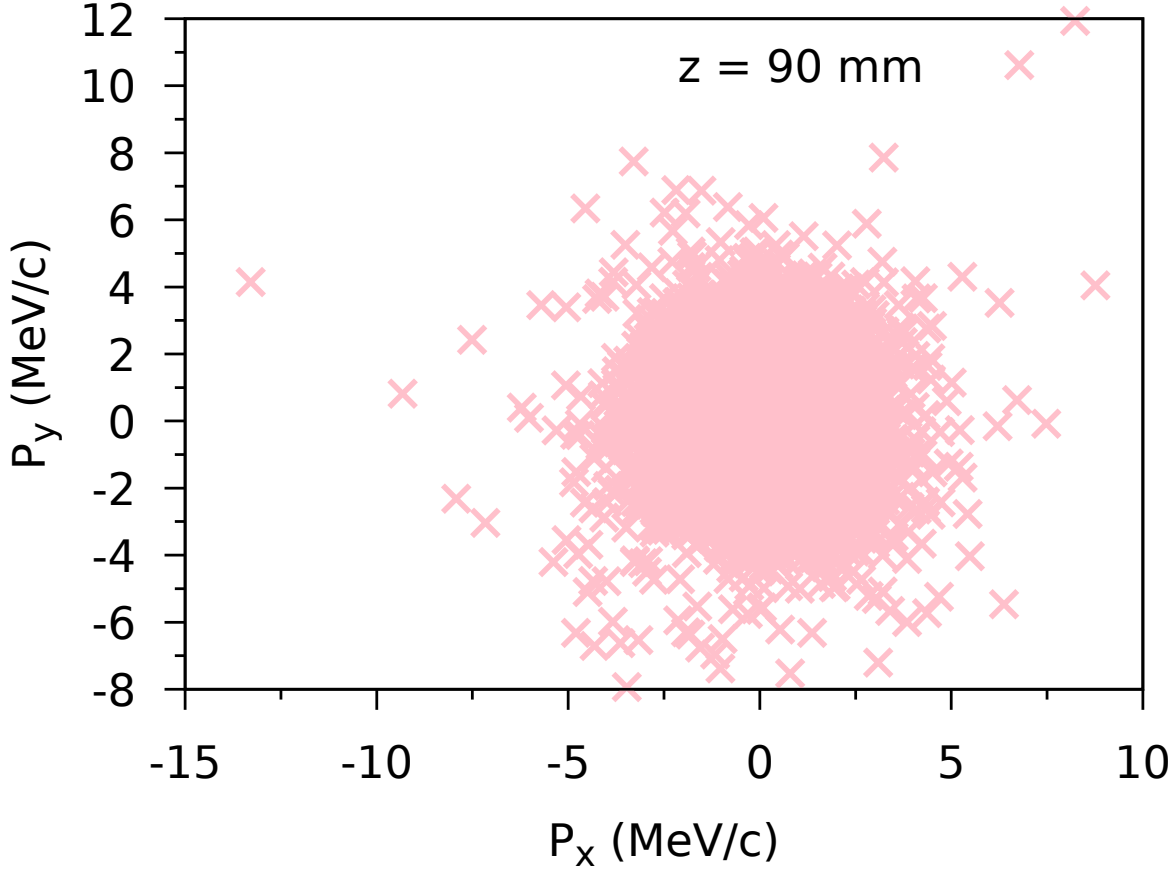

z = 40 mm
15
10
5
0
-5
-10
-15
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

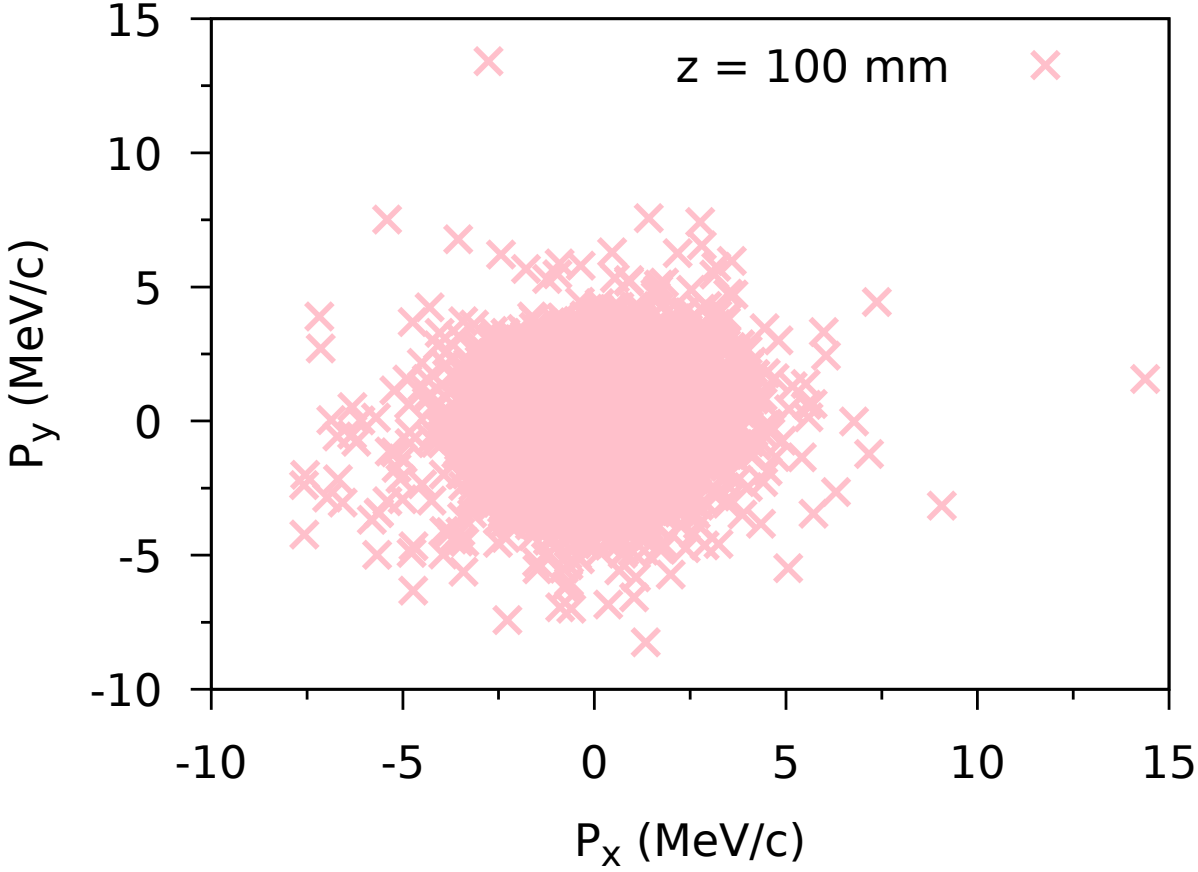

z = 50 mm
15
10
5
0
-5
-10
-15
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

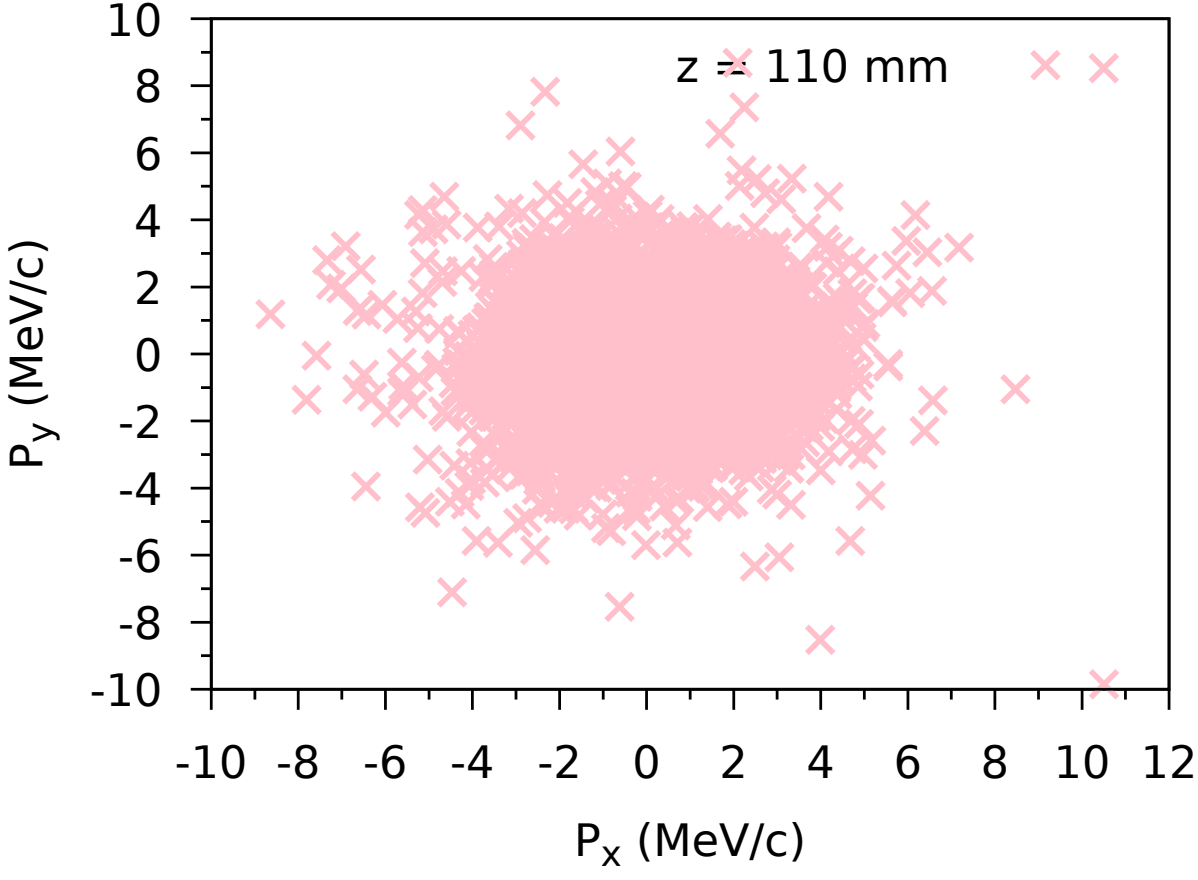

z = 60 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-15
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

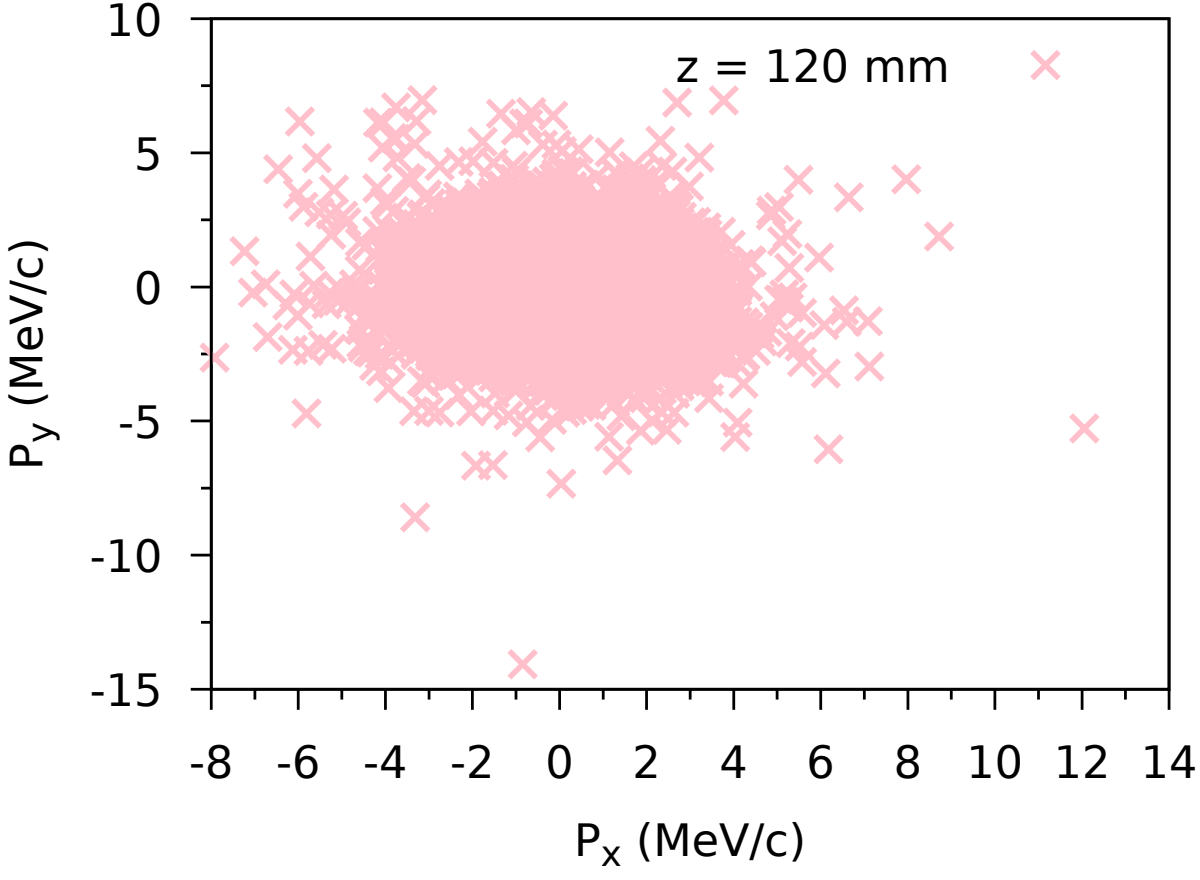

z = 70 mm
10
5
0
-5
-10
-15
-15
-10
-5
0
5
10
P_y (MeV/c)
P_x (MeV/c)

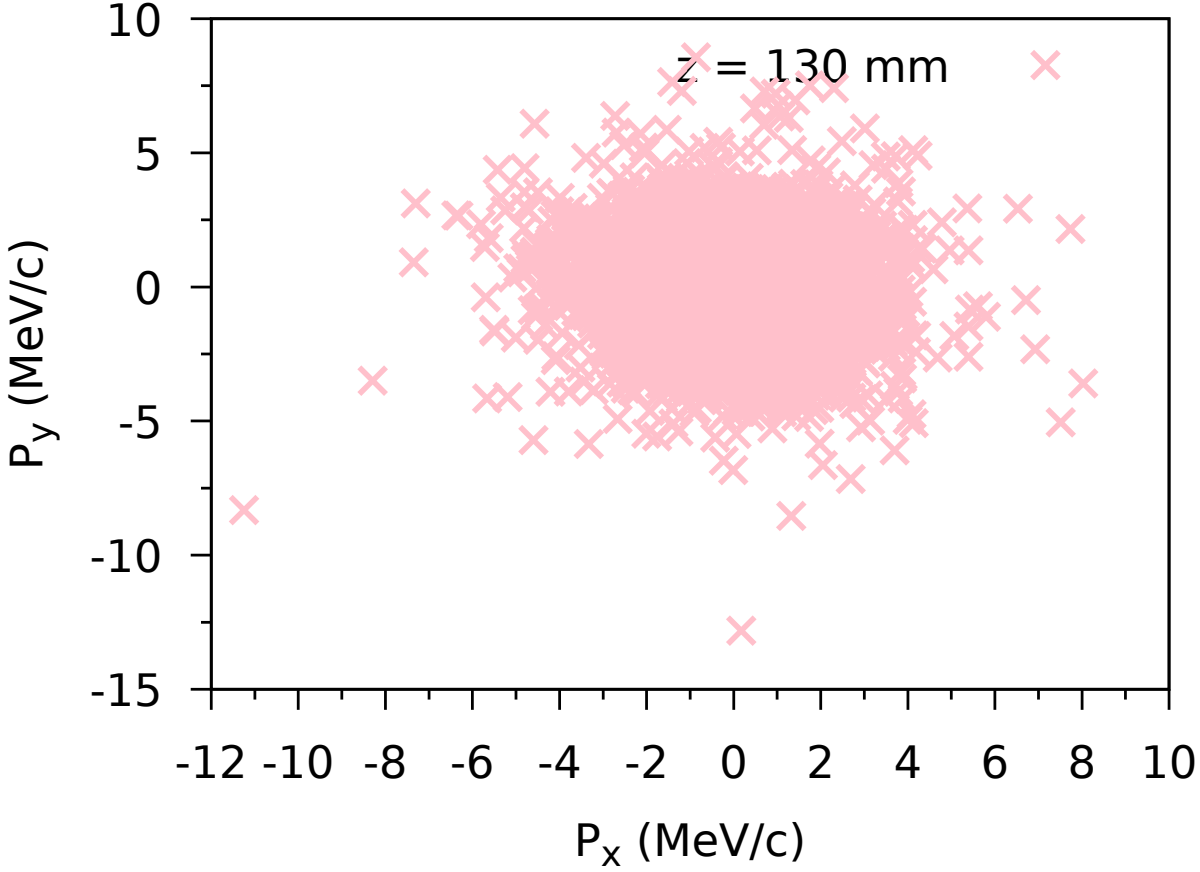

z = 80 mm
15
10
5
0
-5
-10
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

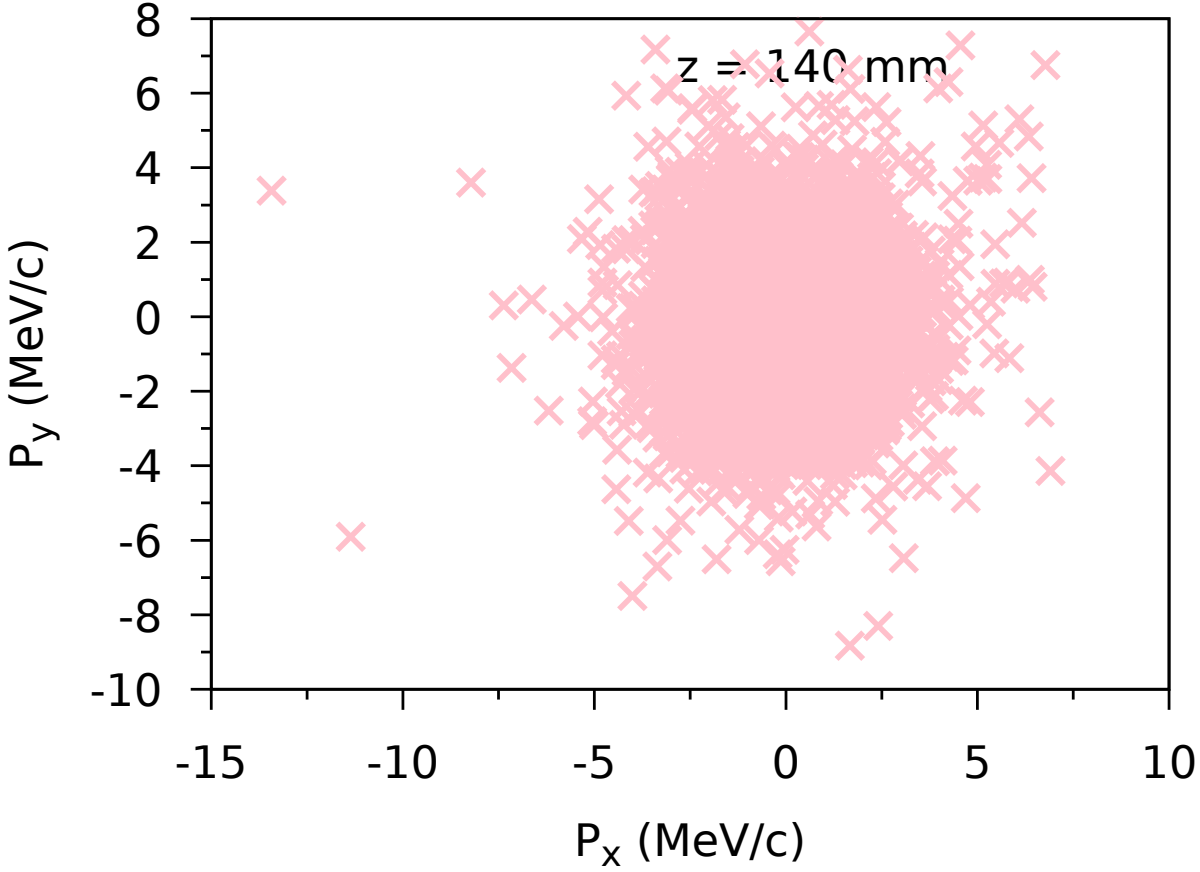

z = 90 mm
12
10
8
6
4
2
0
-2
-4
-6
-8
P_y (MeV/c)
-15
-10
-5
0
5
10
P_x (MeV/c)

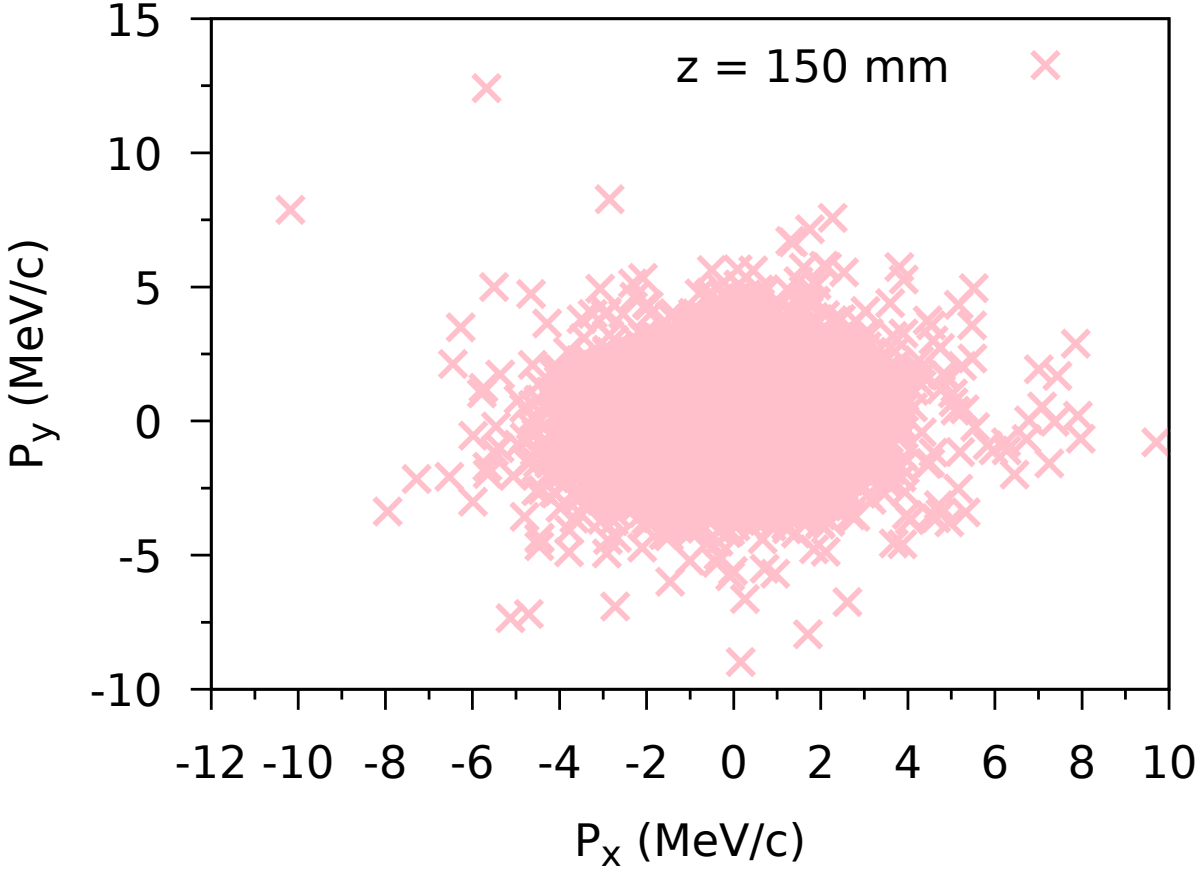

z = 100 mm
15
10
5
0
-5
-10
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

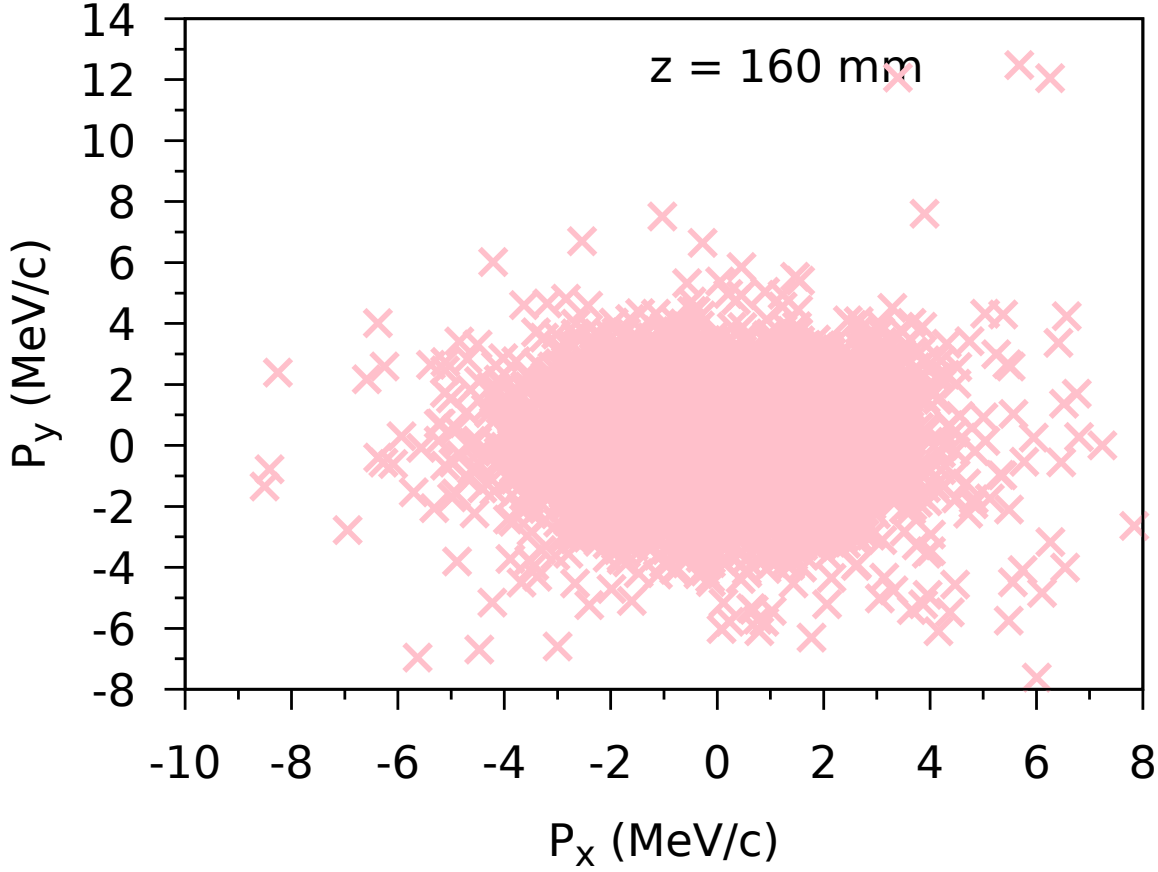

z = 110 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

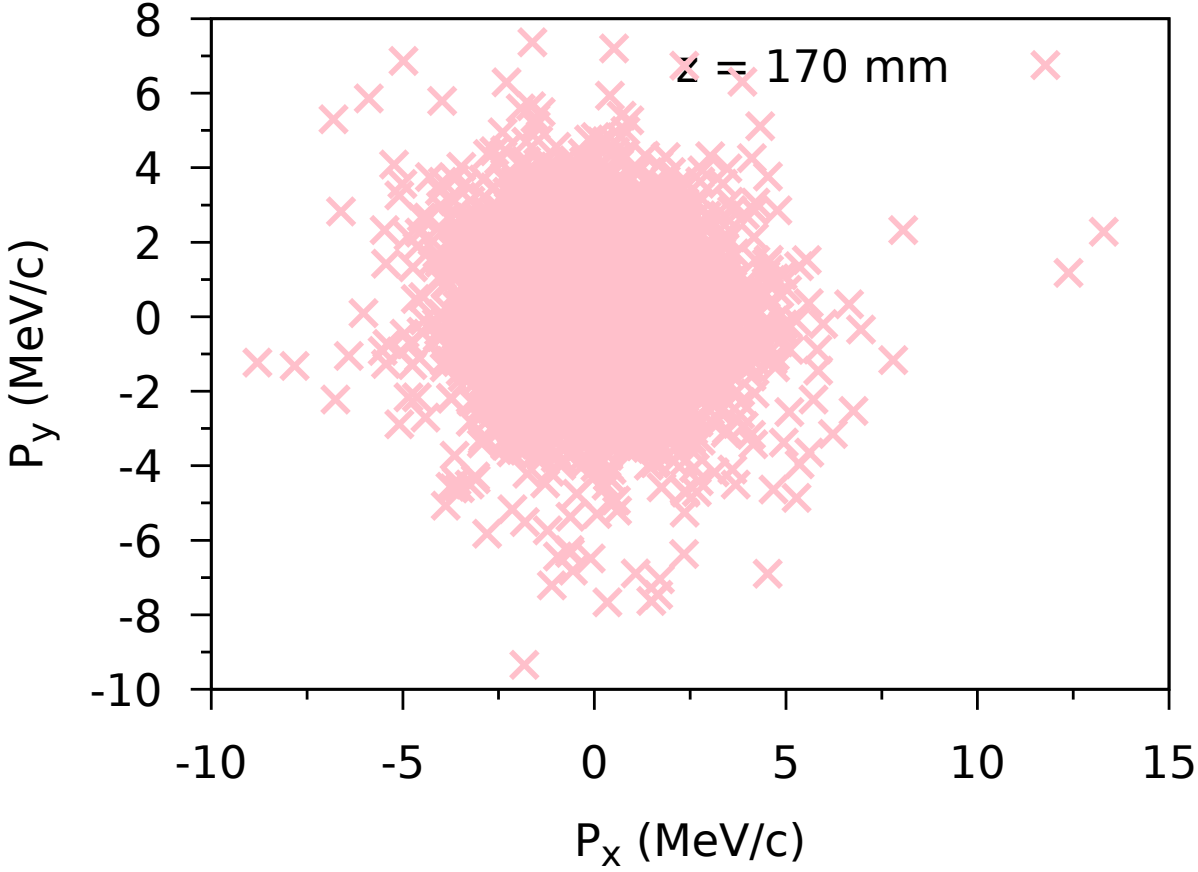

z = 120 mm
10
5
0
-5
-10
-15
-8
-6
-4
-2
0
2
4
6
8
10
12
14
P_y (MeV/c)
P_x (MeV/c)

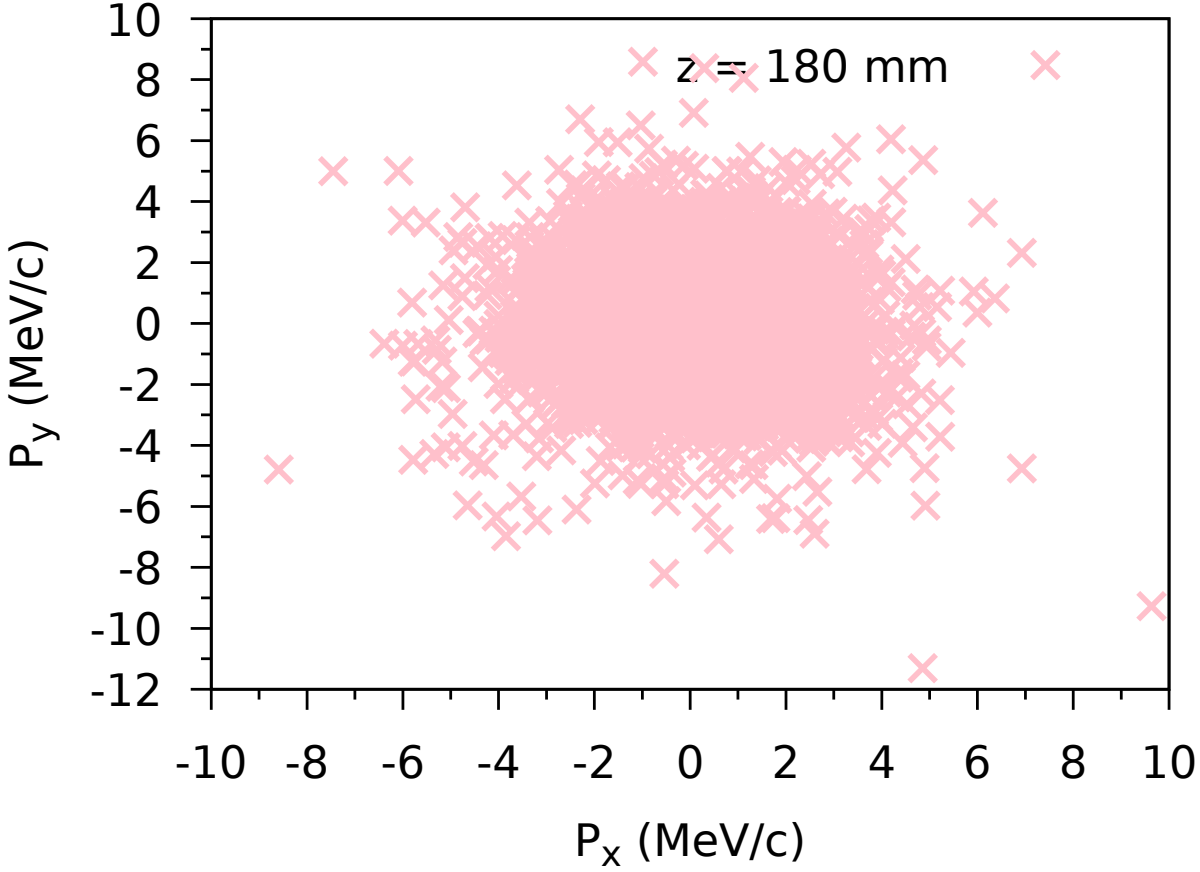

z = 130 mm
10
5
0
-5
-10
-15
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

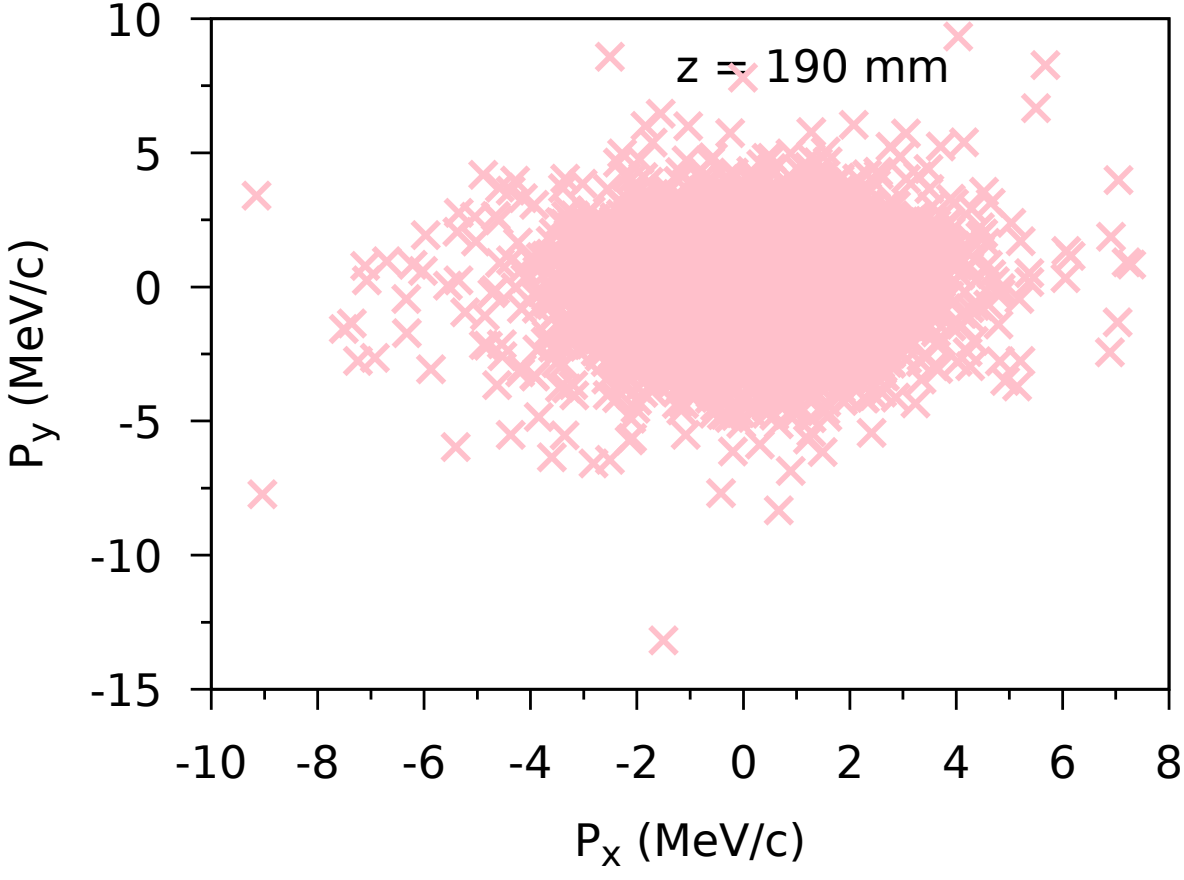

z = -140 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-15
-10
-5
0
5
10
P_y (MeV/c)
P_x (MeV/c)

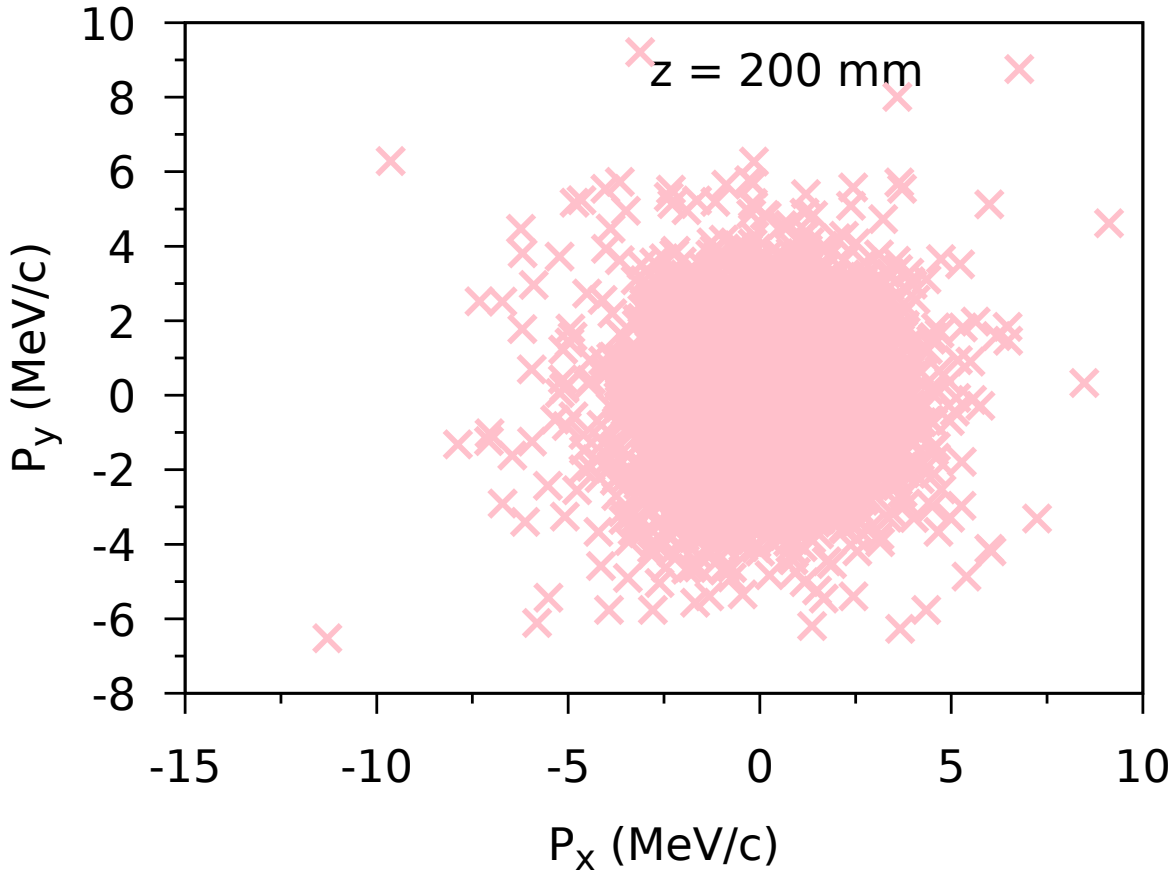

z = 150 mm
15
10
5
0
-5
-10
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

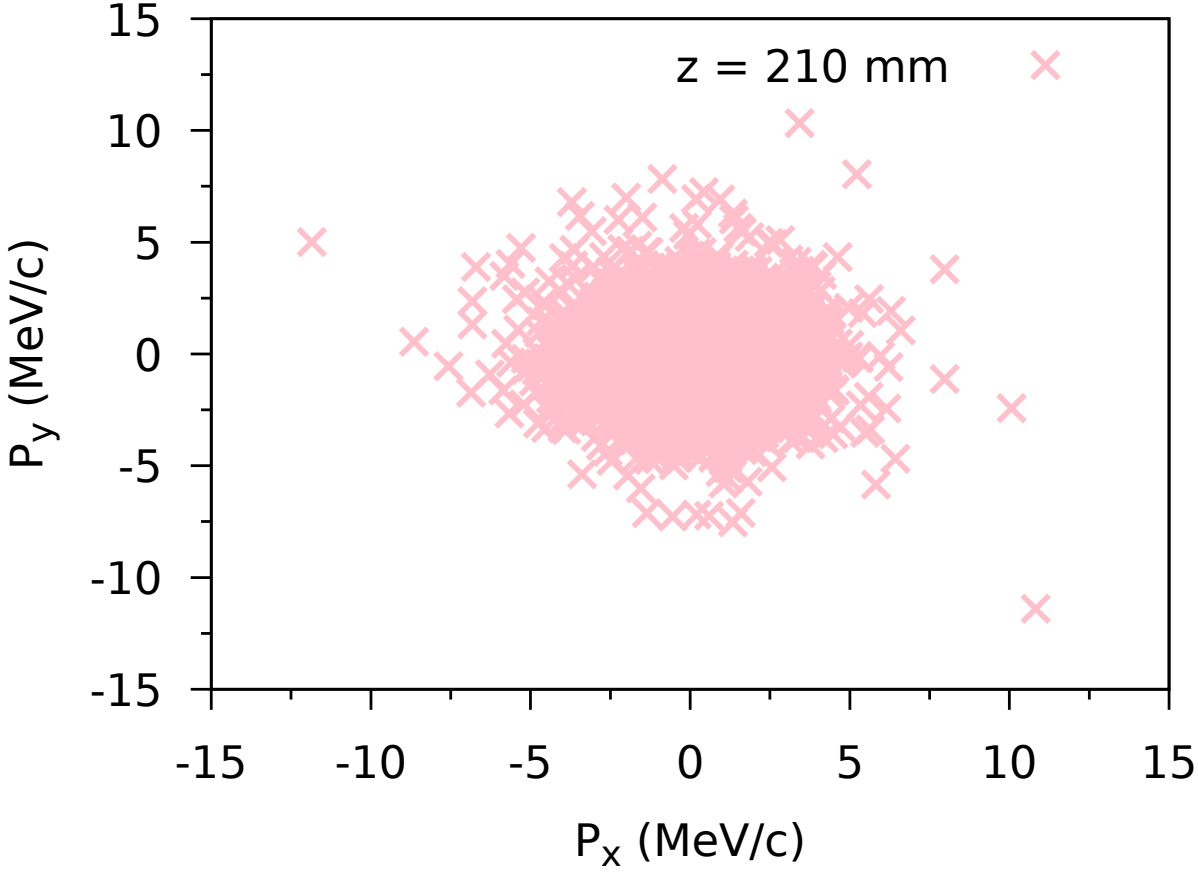

z = 160 mm
14
12
10
8
6
4
2
0
-2
-4
-6
-8
P_y (MeV/c)
-10
-8
-6
-4
-2
0
2
4
6
8
P_x (MeV/c)

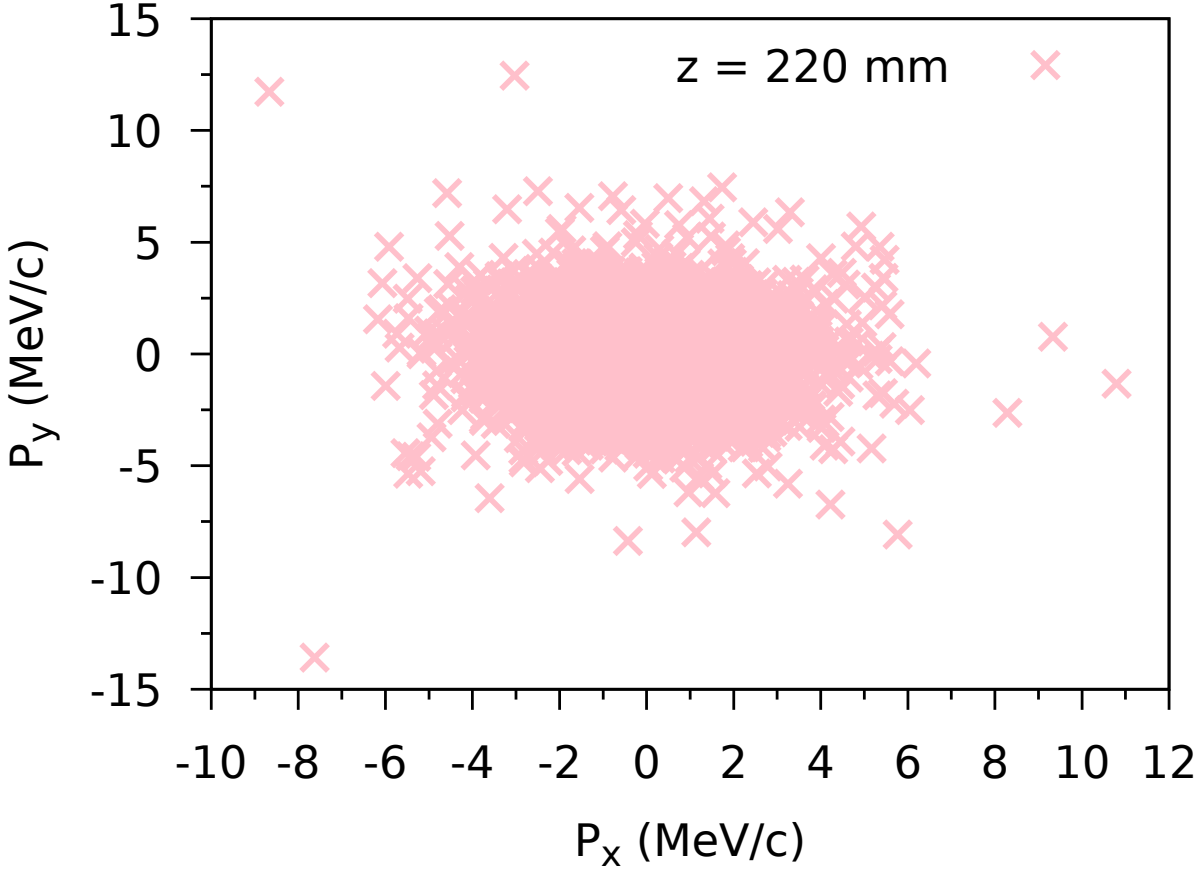

z = 170 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

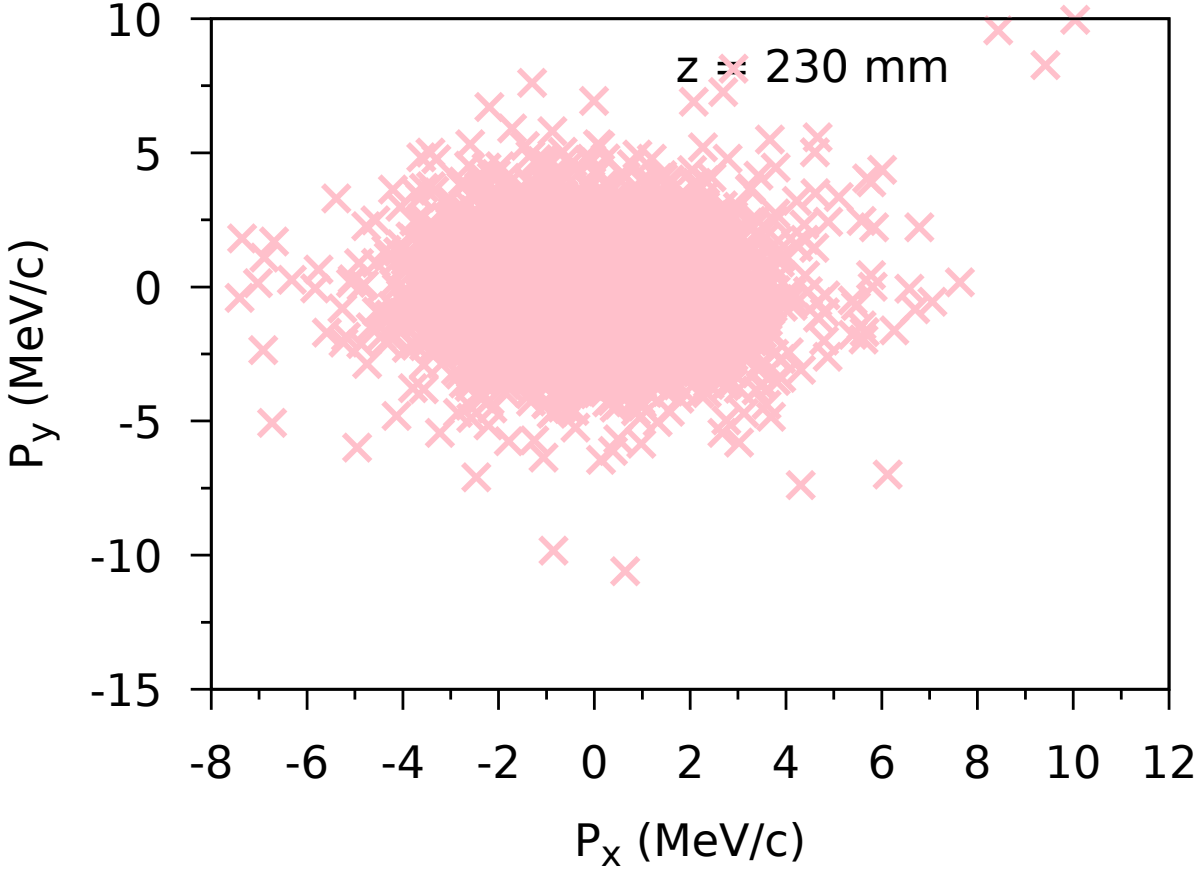

z = 180 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

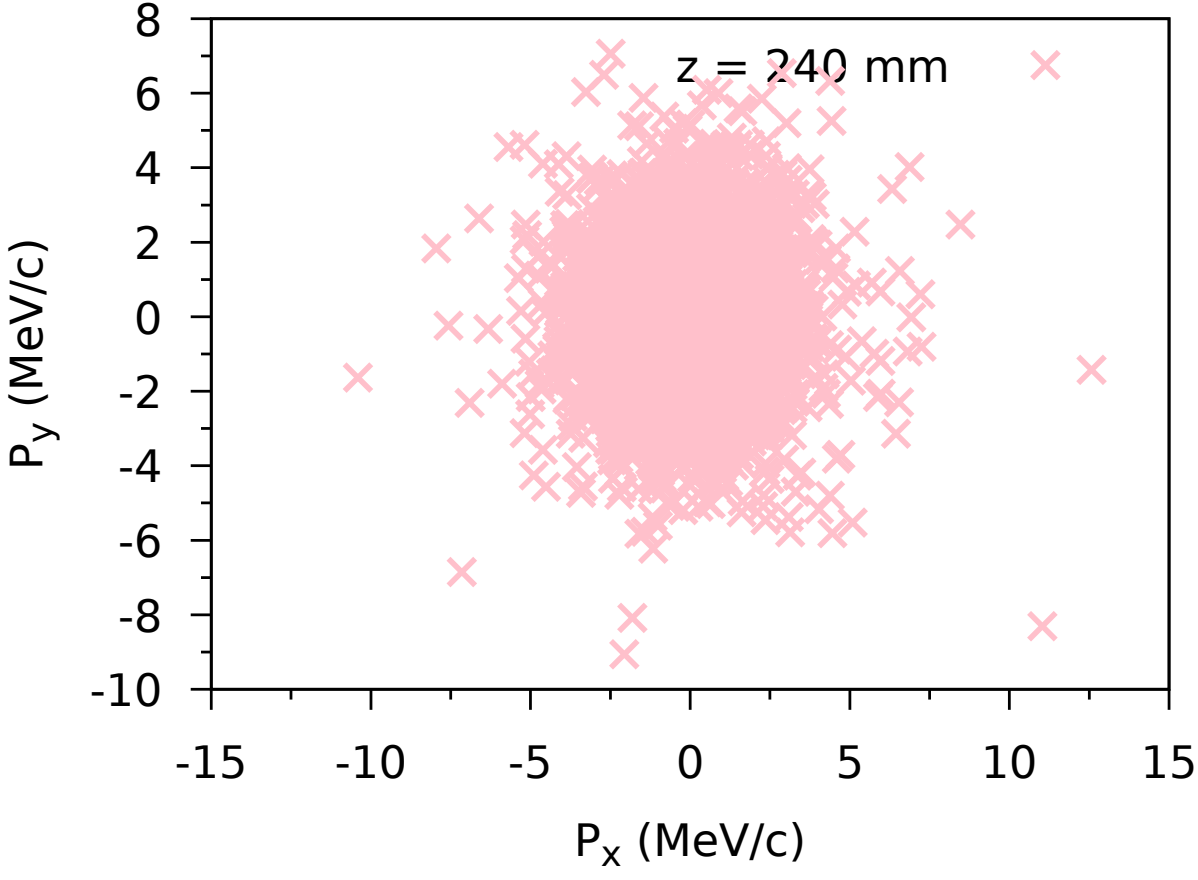

z = 190 mm
10
5
0
-5
-10
-15
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

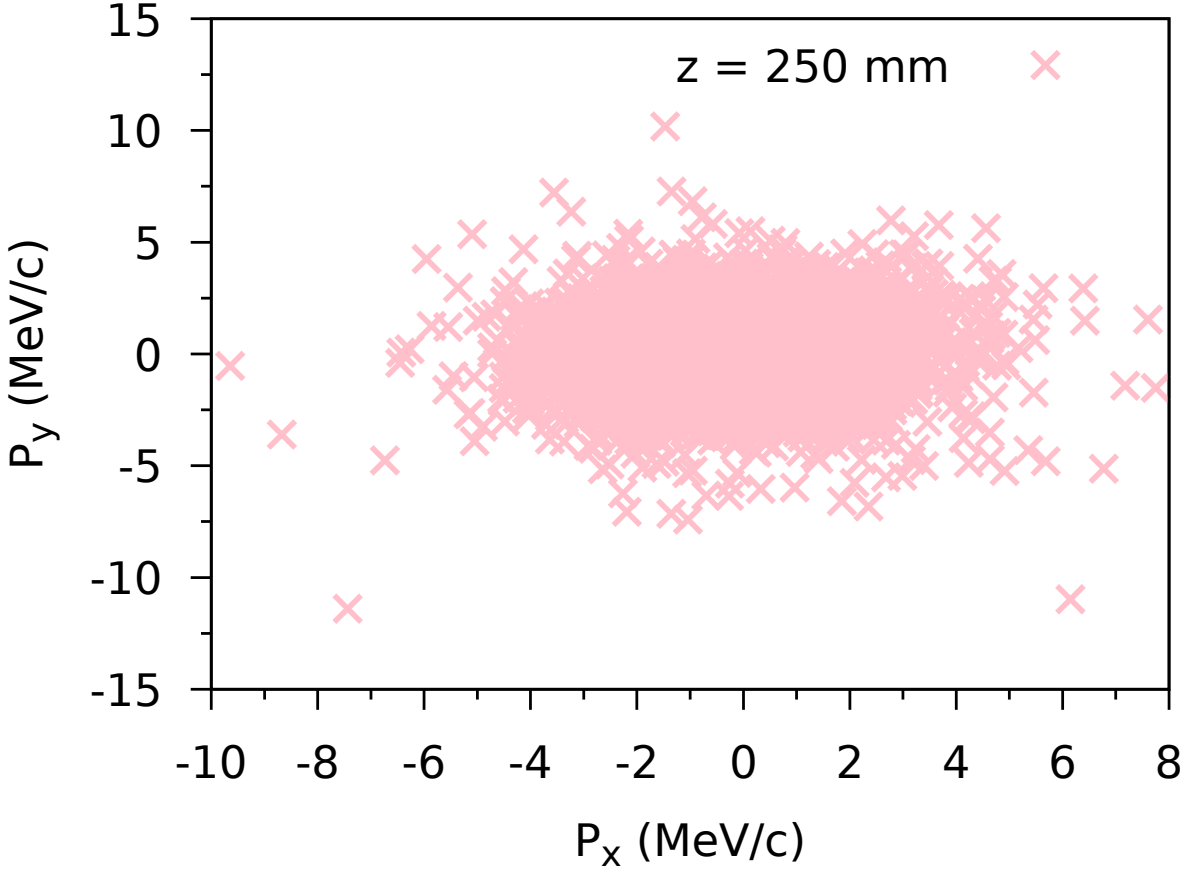

z = 200 mm
10
8
6
4
2
0
-2
-4
-6
-8
P_y (MeV/c)
-15
-10
-5
0
5
10
P_x (MeV/c)

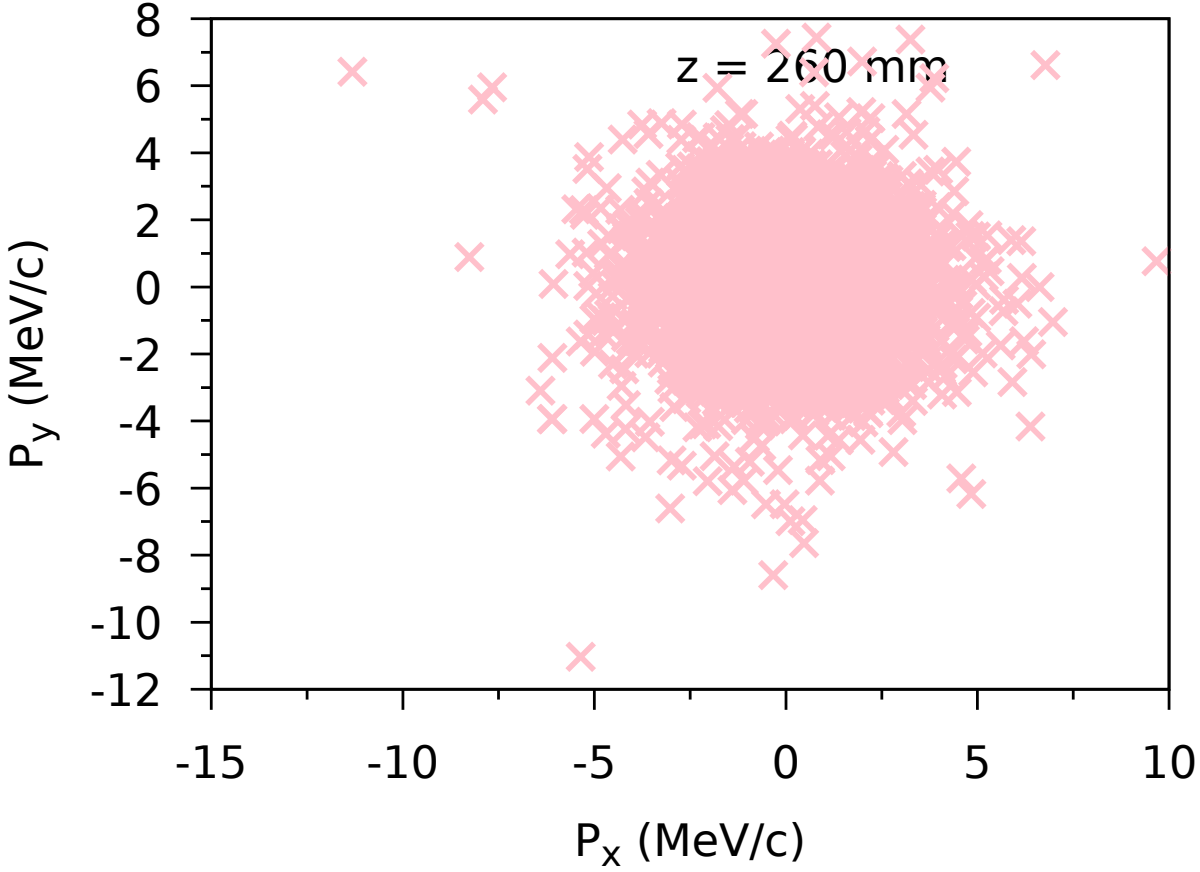

z = 210 mm
15
10
5
0
-5
-10
-15
-15
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

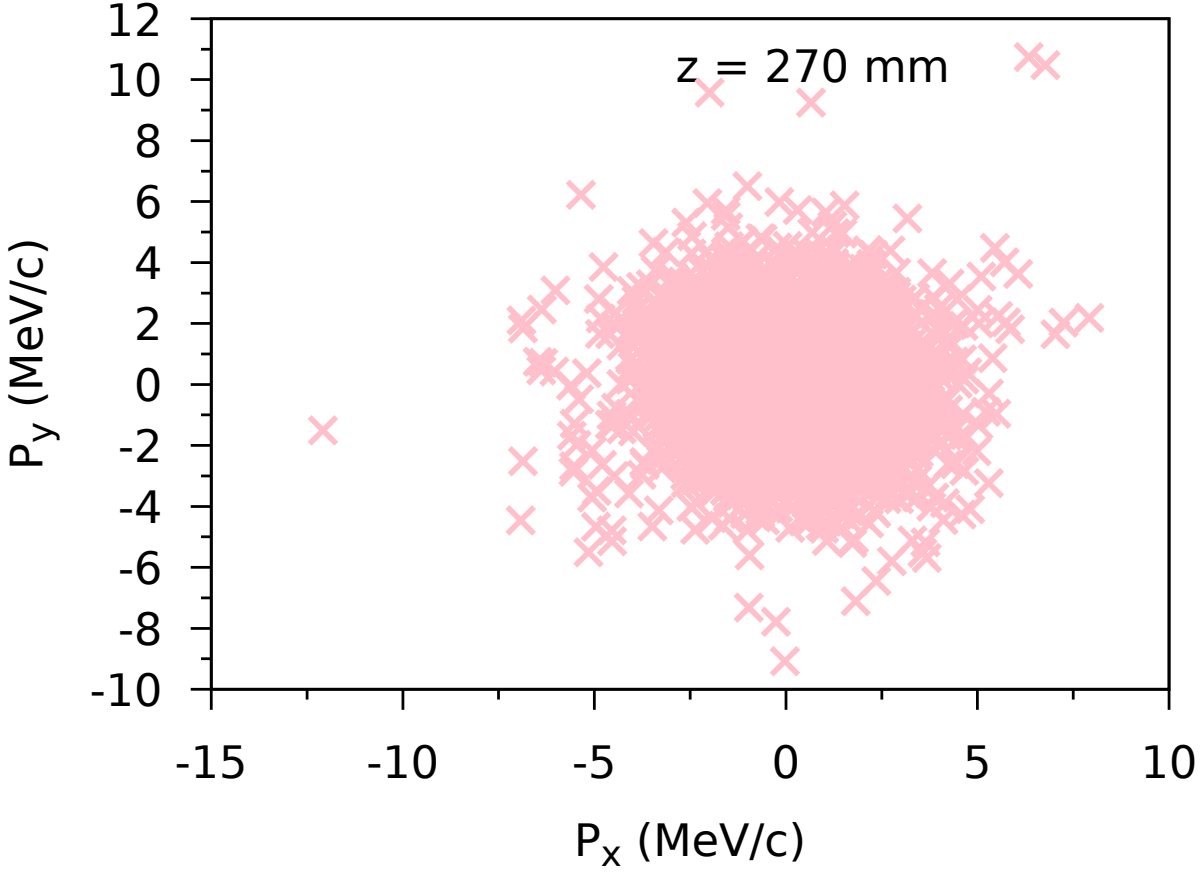

z = 220 mm
15
10
5
0
-5
-10
-15
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

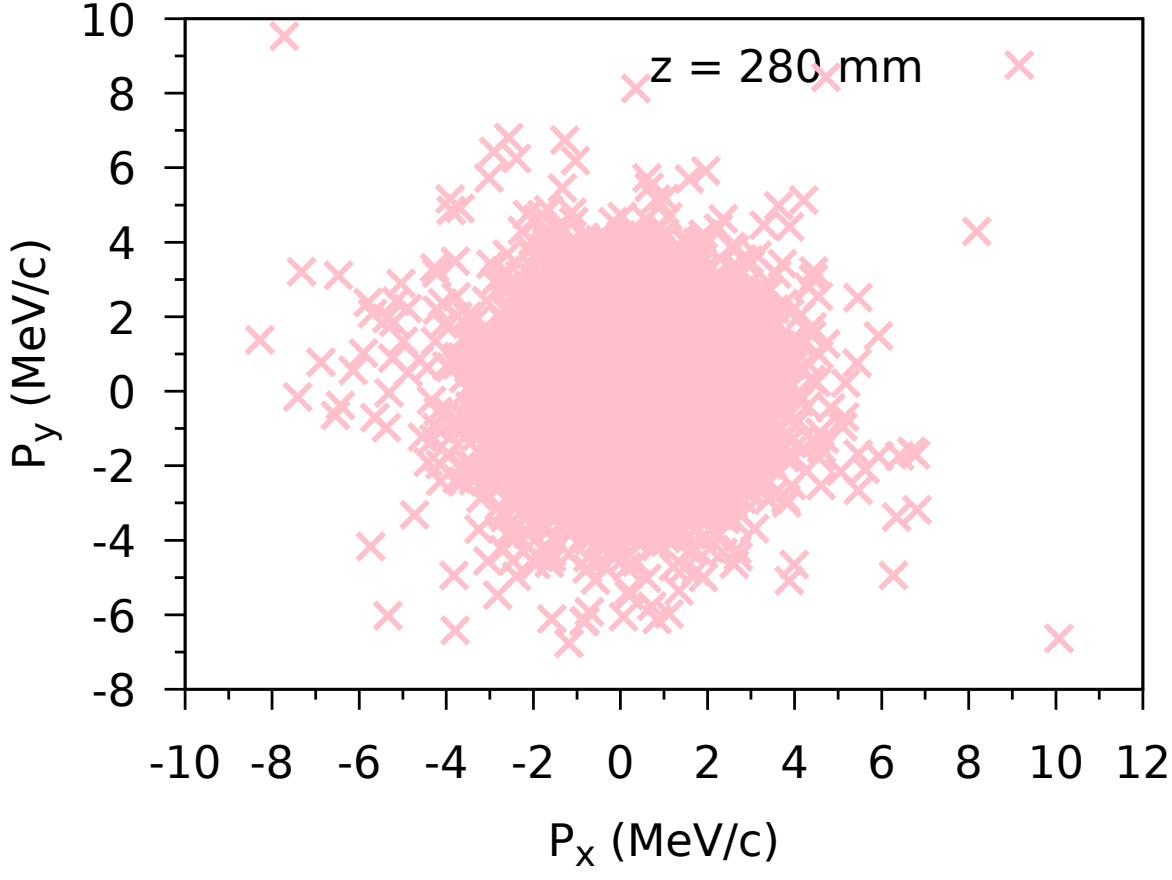

z = 230 mm
10
5
0
-5
-10
-15
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

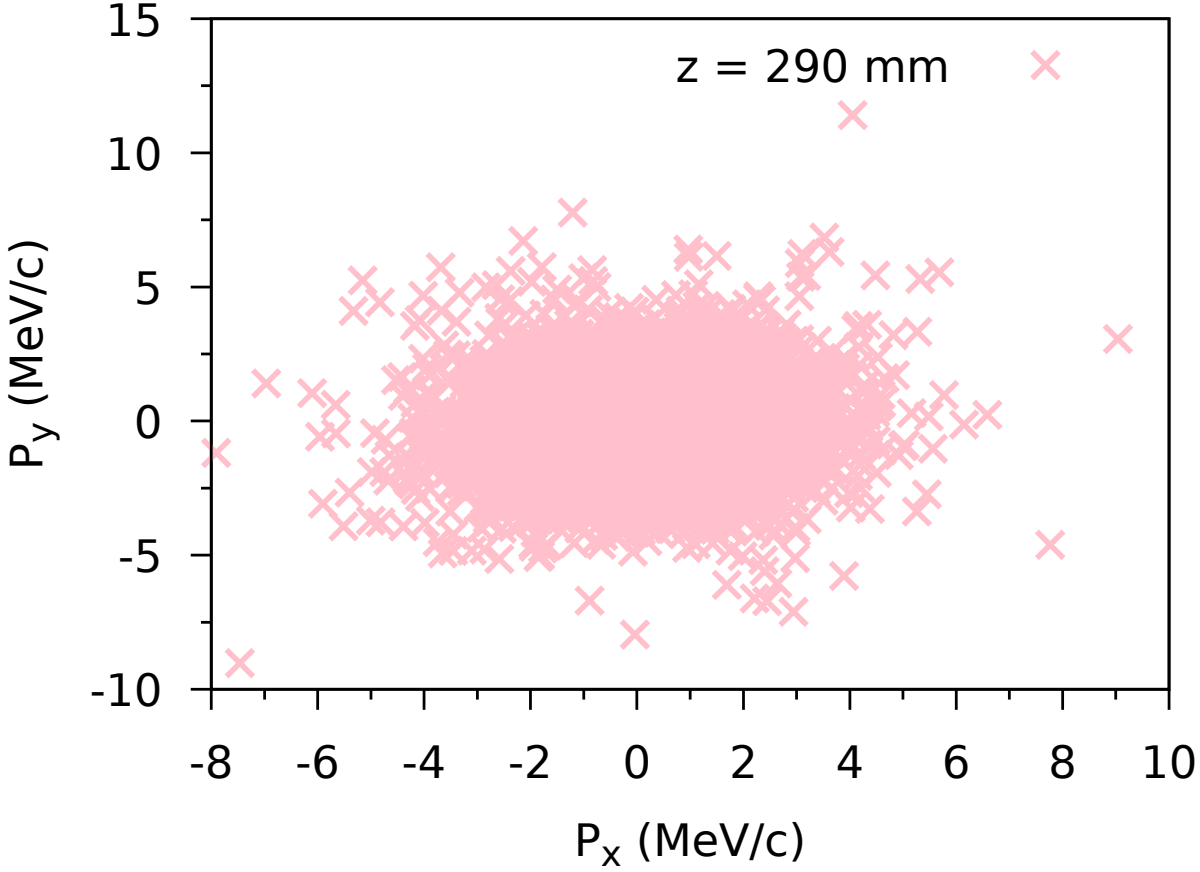

z = 240 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-15
-10
-5
0
5
10
15
P_y (MeV/c)
P_x (MeV/c)

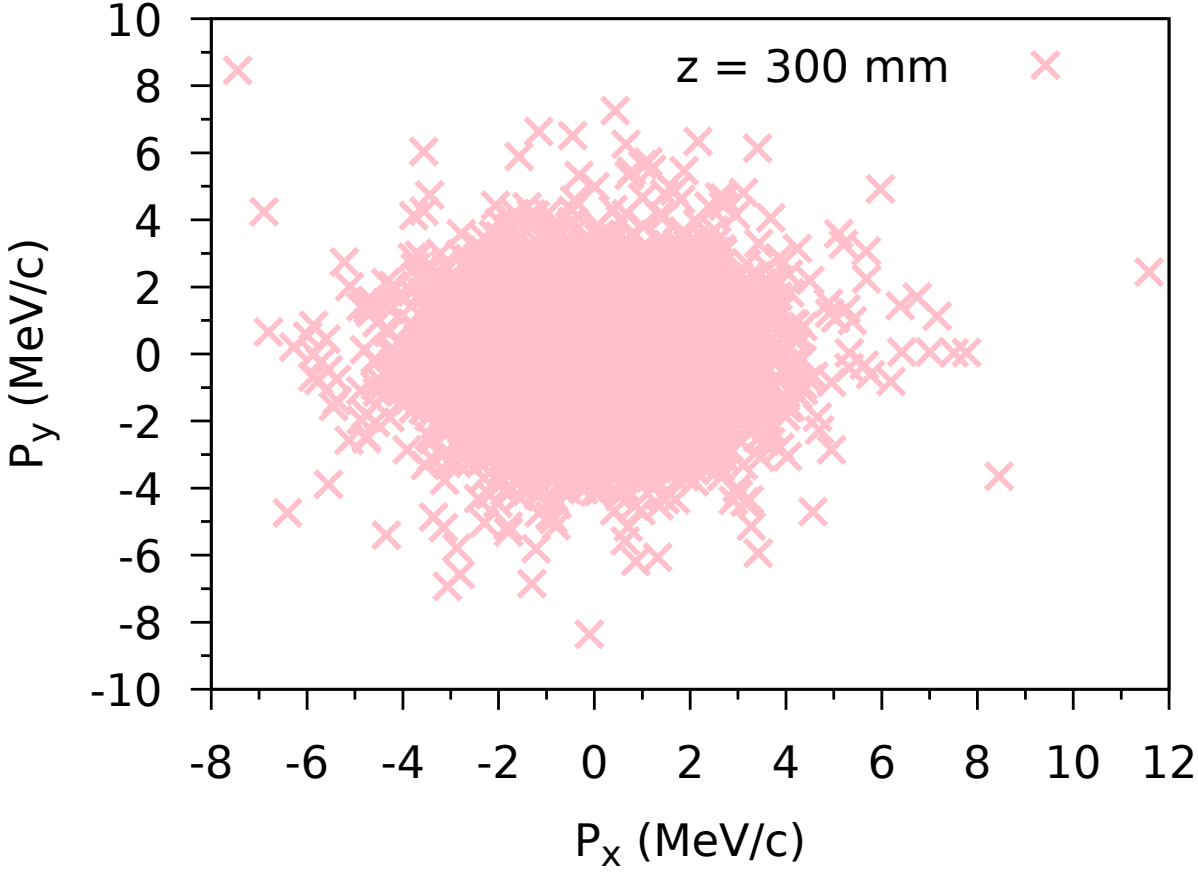

z = 250 mm
15
10
5
0
-5
-10
-15
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

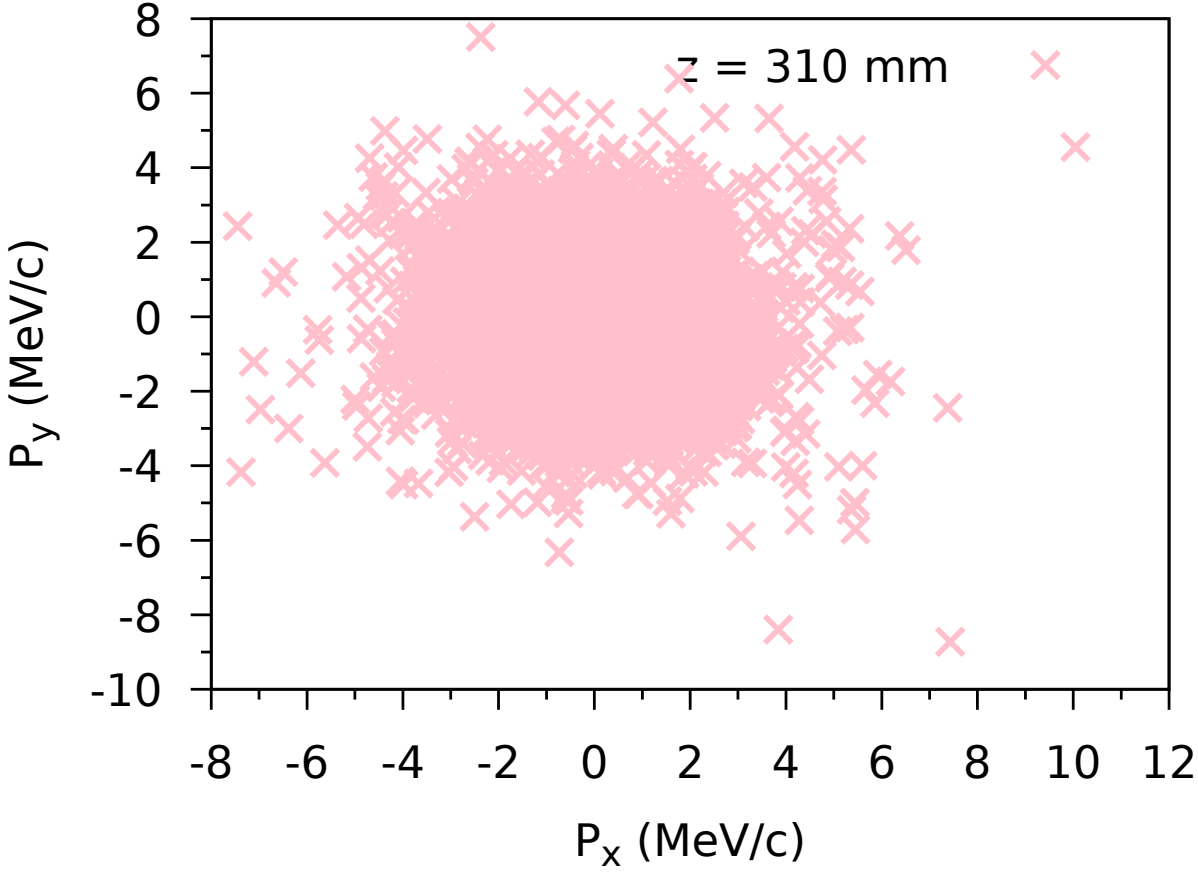

z = 260 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-15
-10
-5
0
5
10
P_y (MeV/c)
P_x (MeV/c)

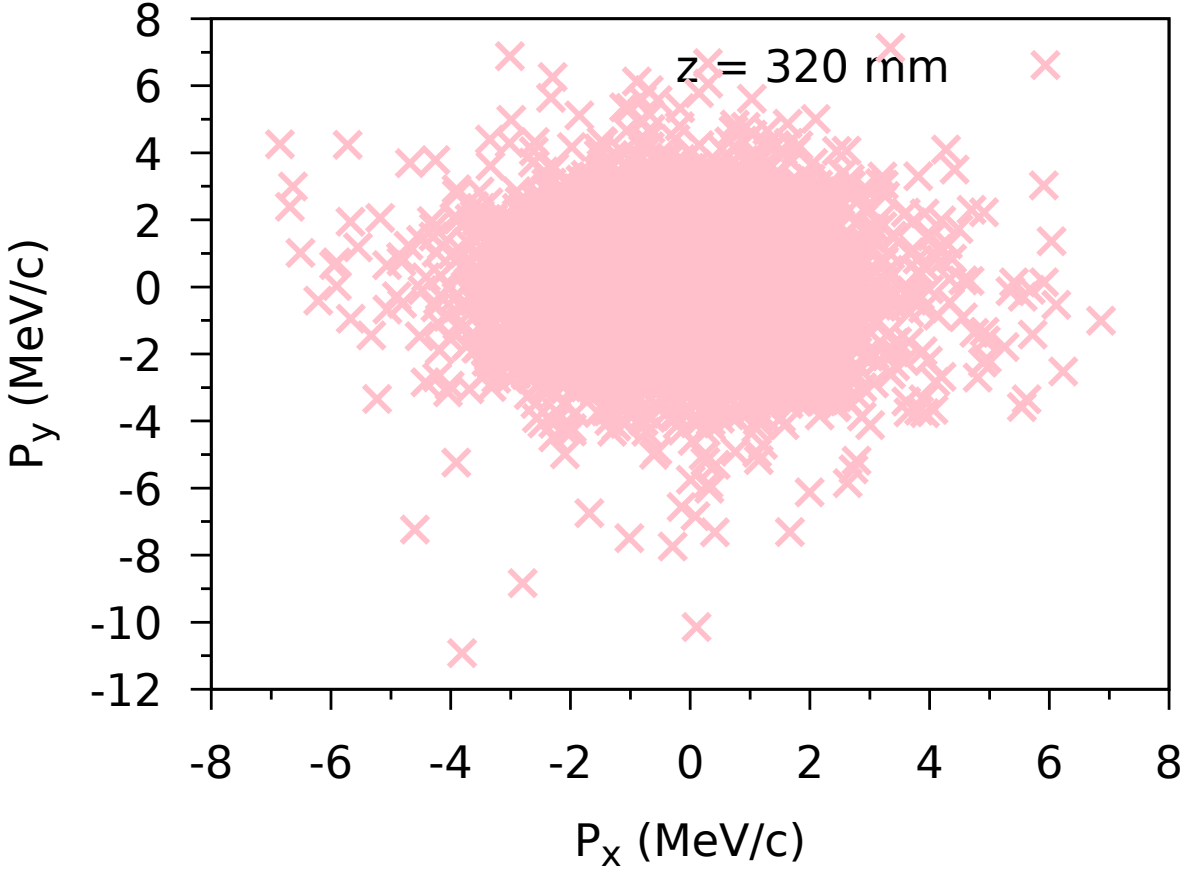

z = 270 mm
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-15
-10
-5
0
5
10
P_y (MeV/c)
P_x (MeV/c)

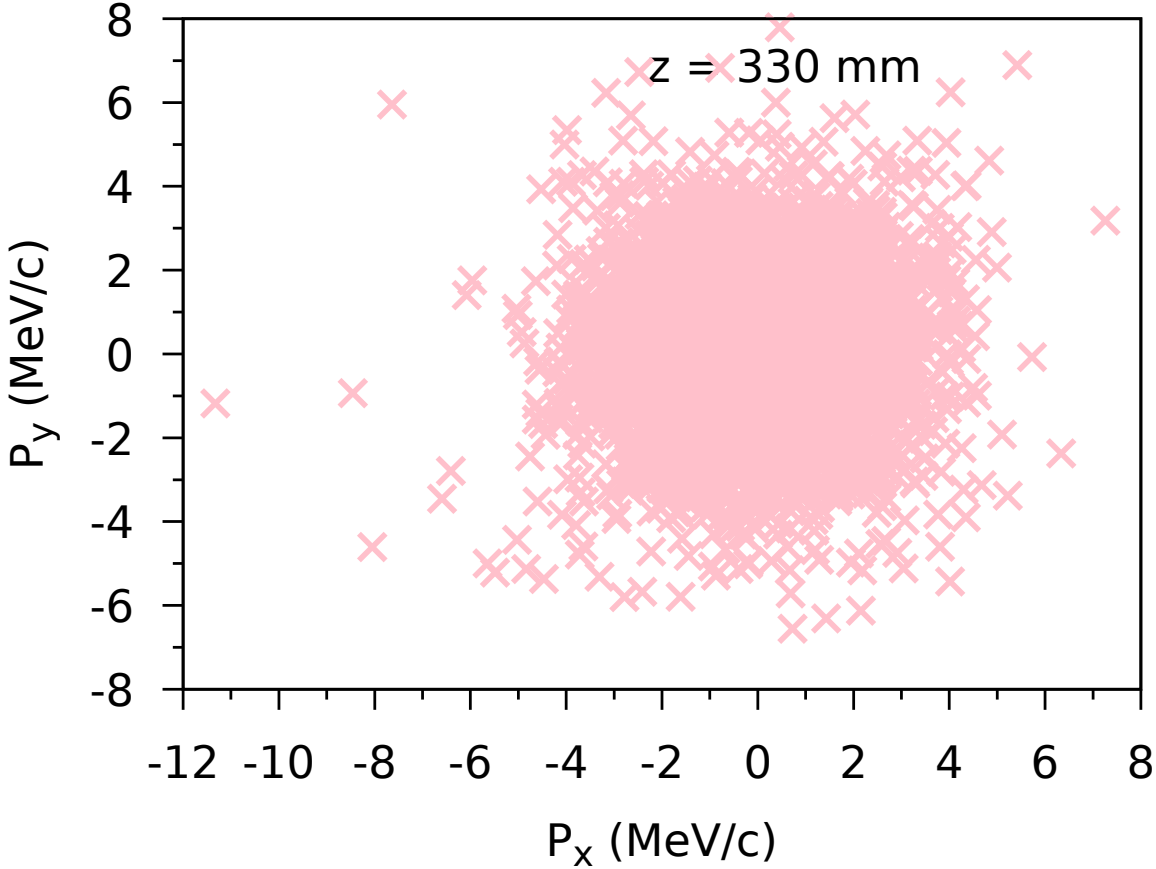

z = 280 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

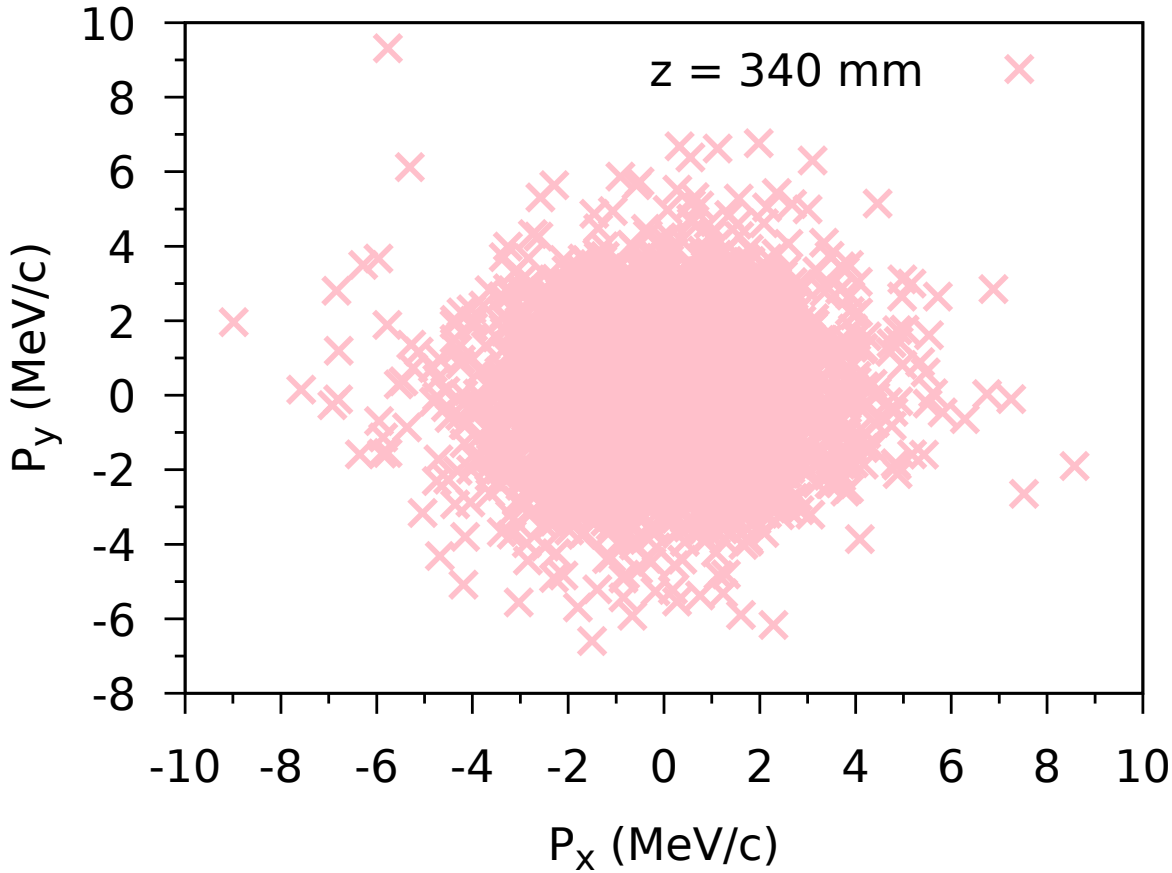

z = 290 mm
15
10
5
0
-5
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

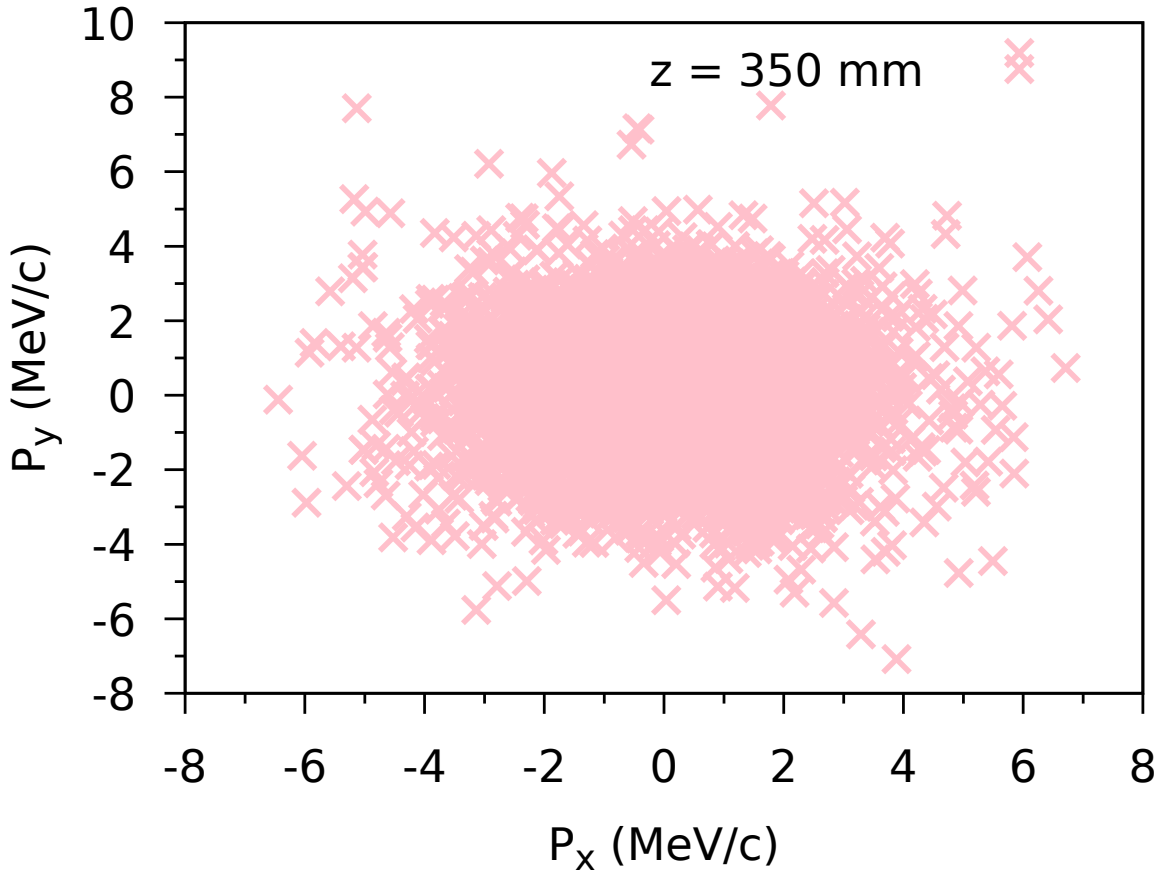

z = 300 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

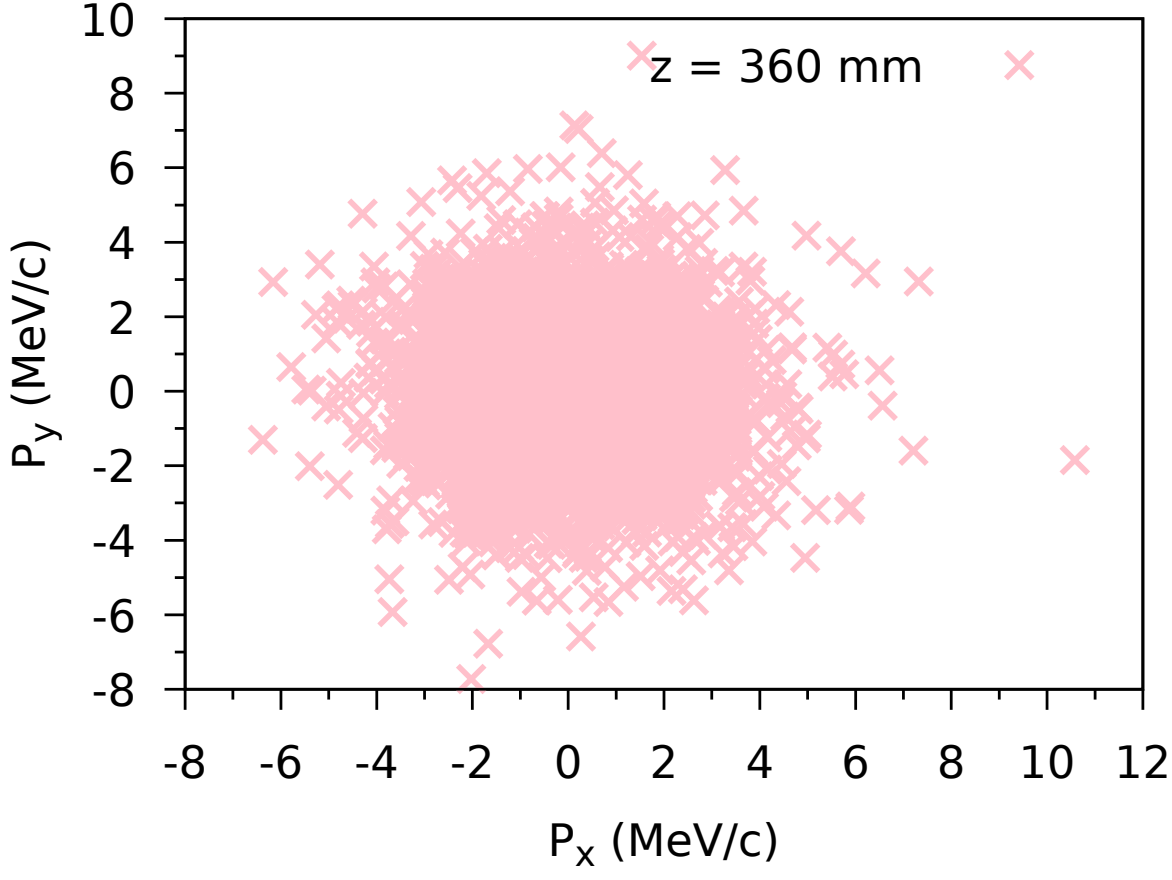

z = 310 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

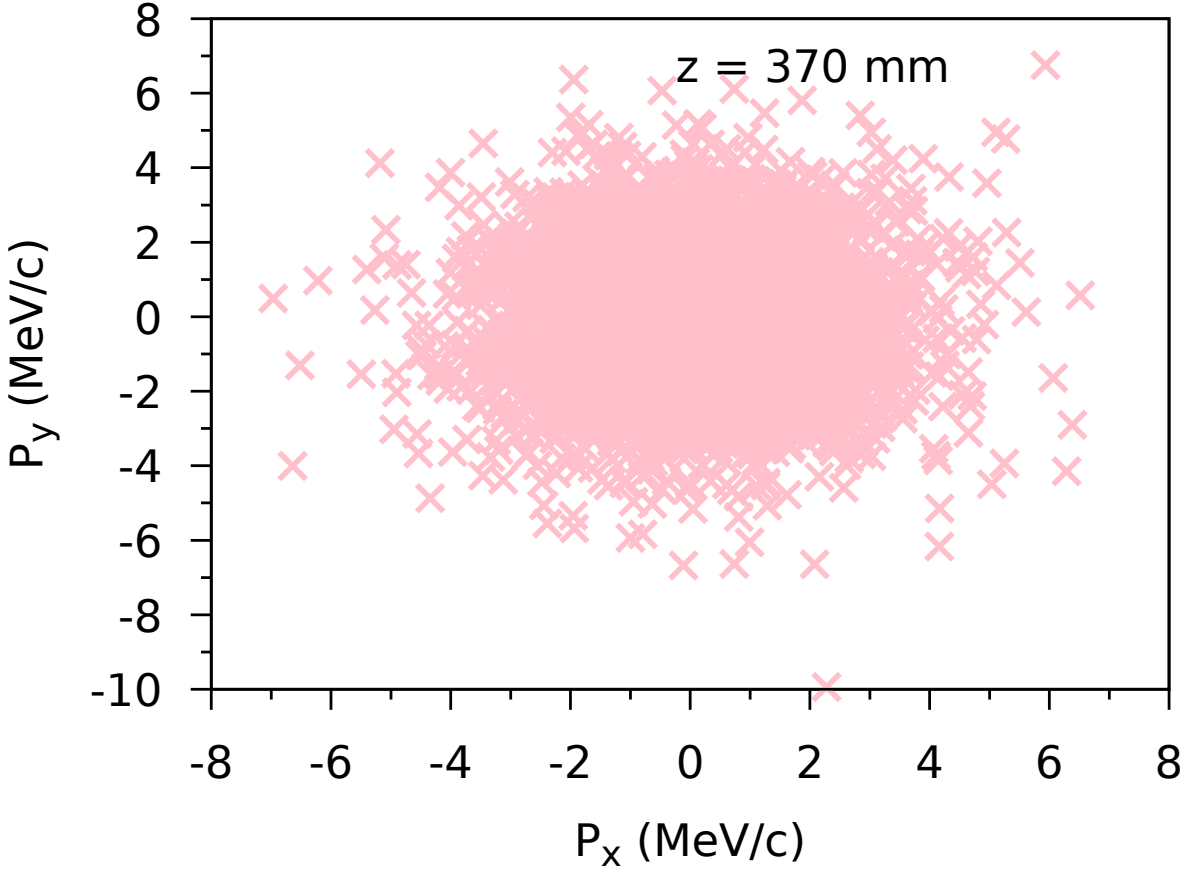

z = 320 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

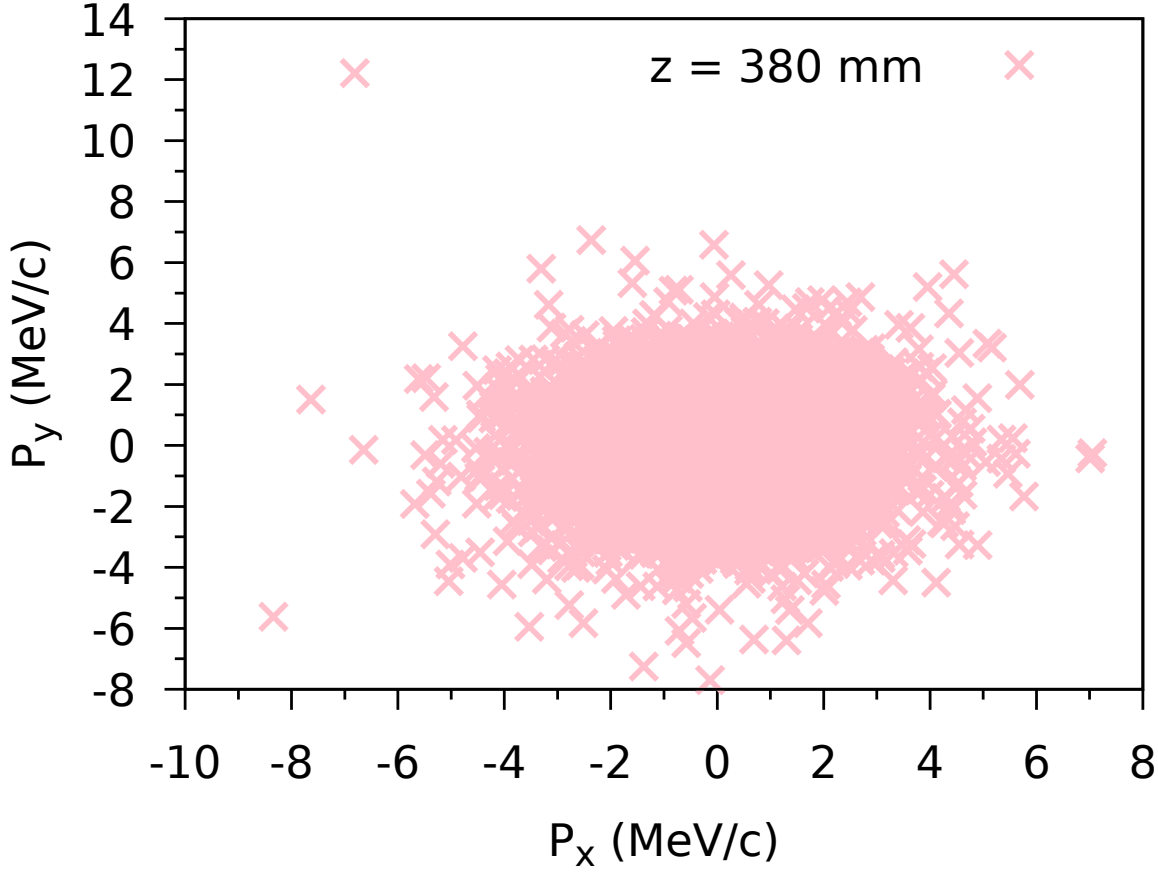

z = 330 mm
8
6
4
2
0
-2
-4
-6
-8
-12
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

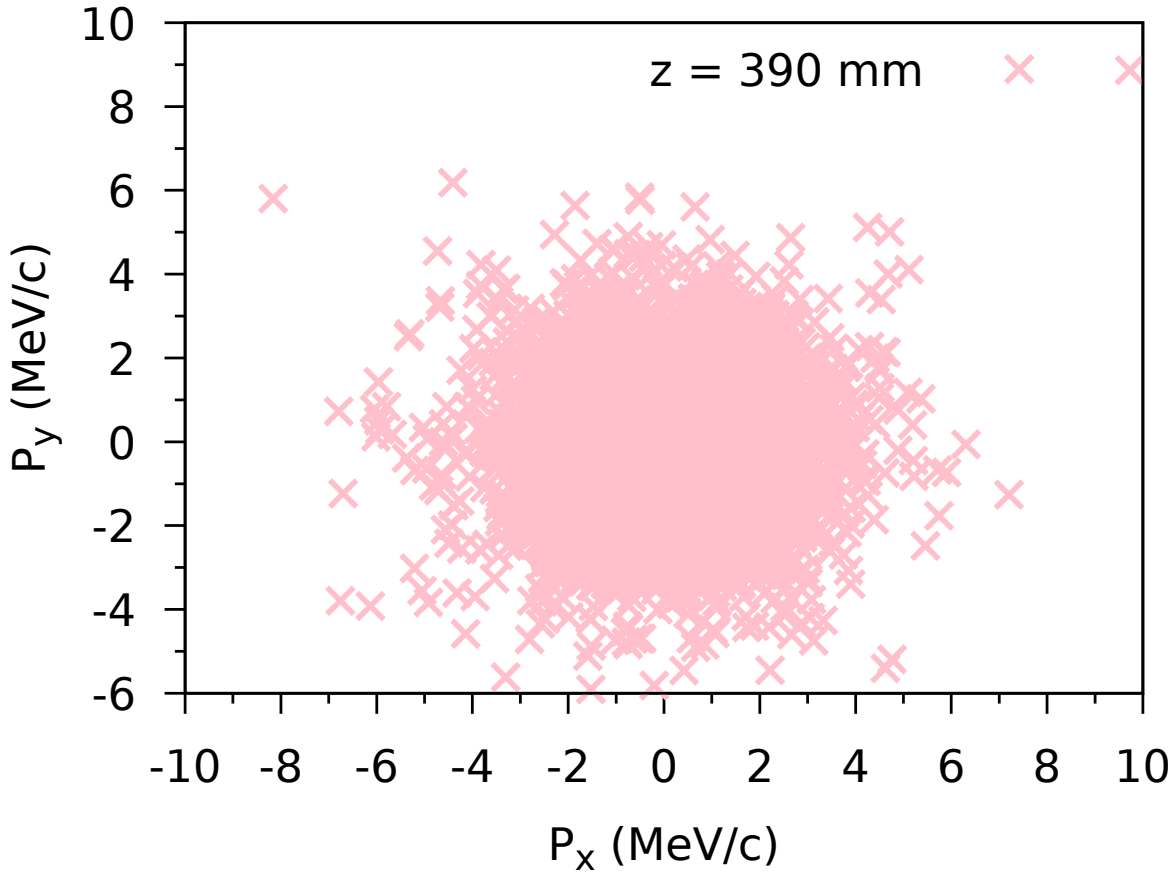

z = 340 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

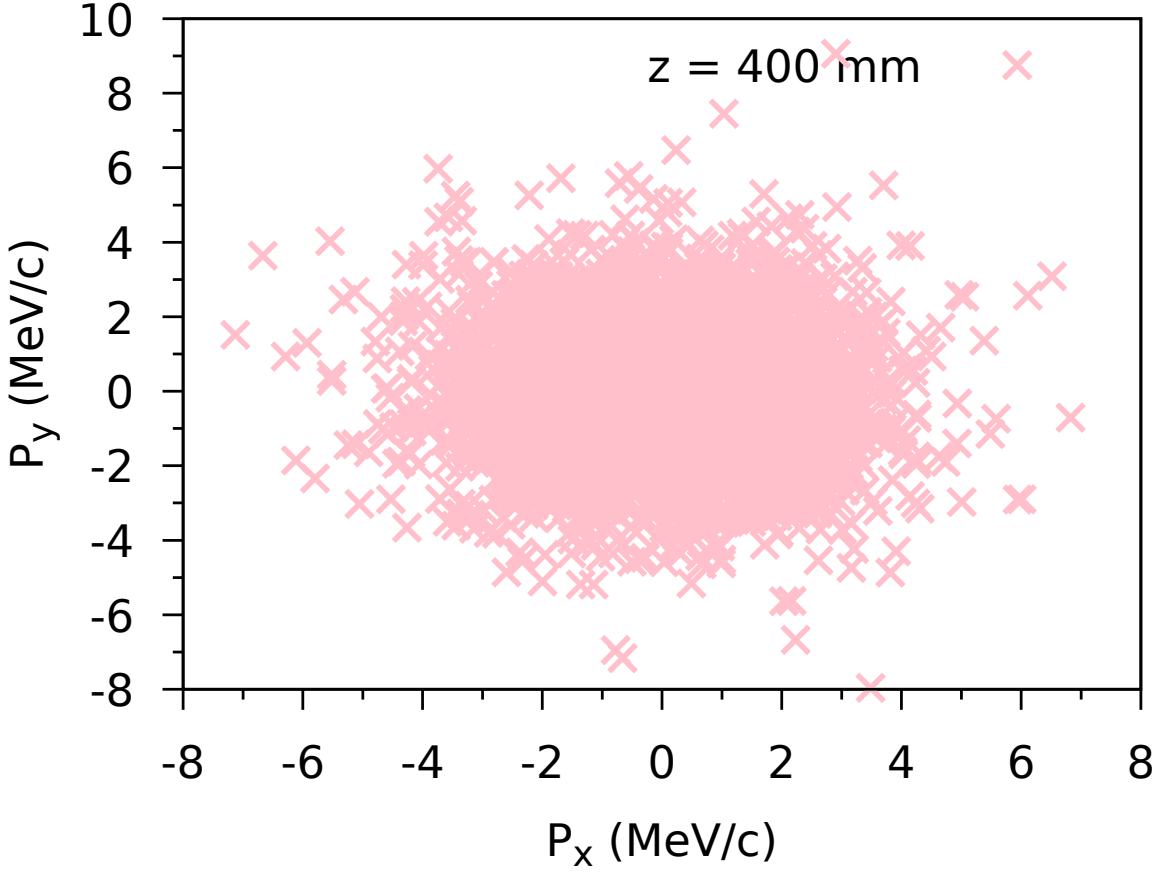

z = 350 mm
10
8
6
4
2
0
-2
-4
-6
-8
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

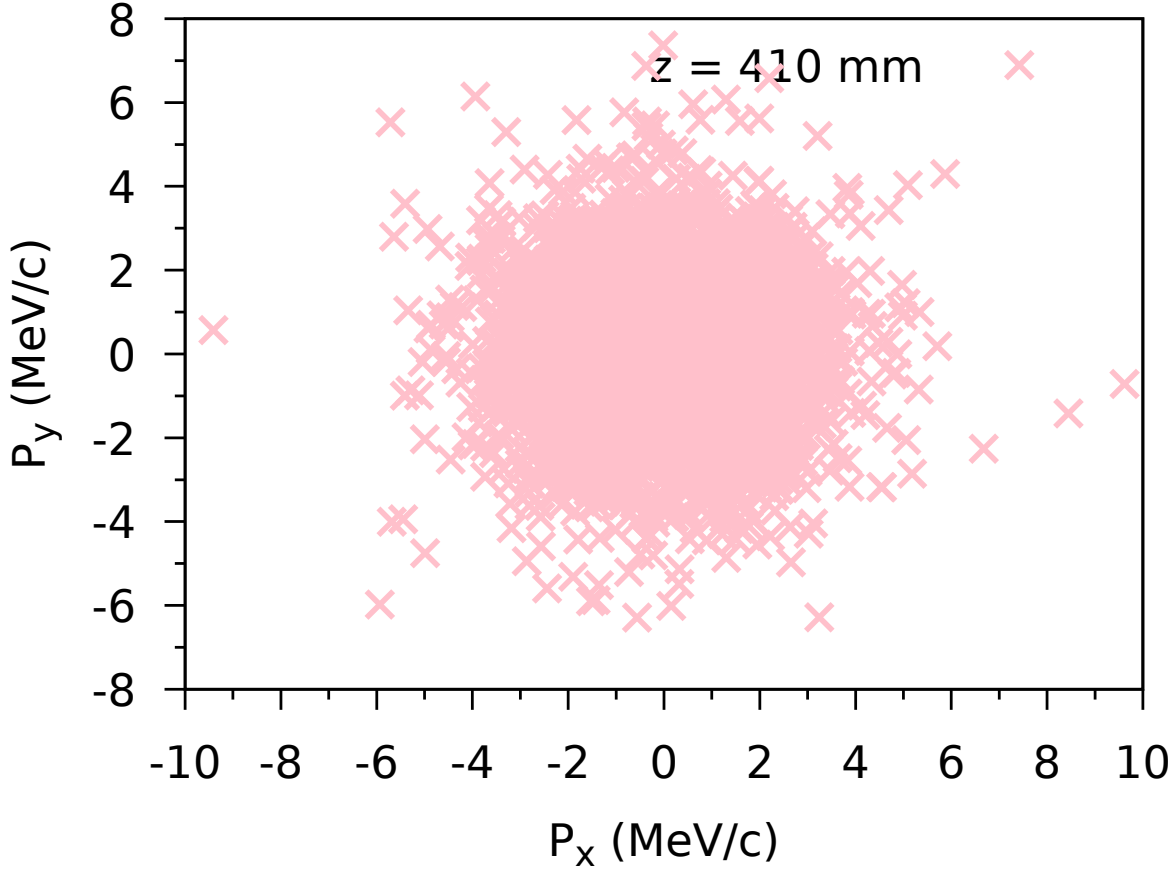

z = 360 mm
10
8
6
4
2
0
-2
-4
-6
-8
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)

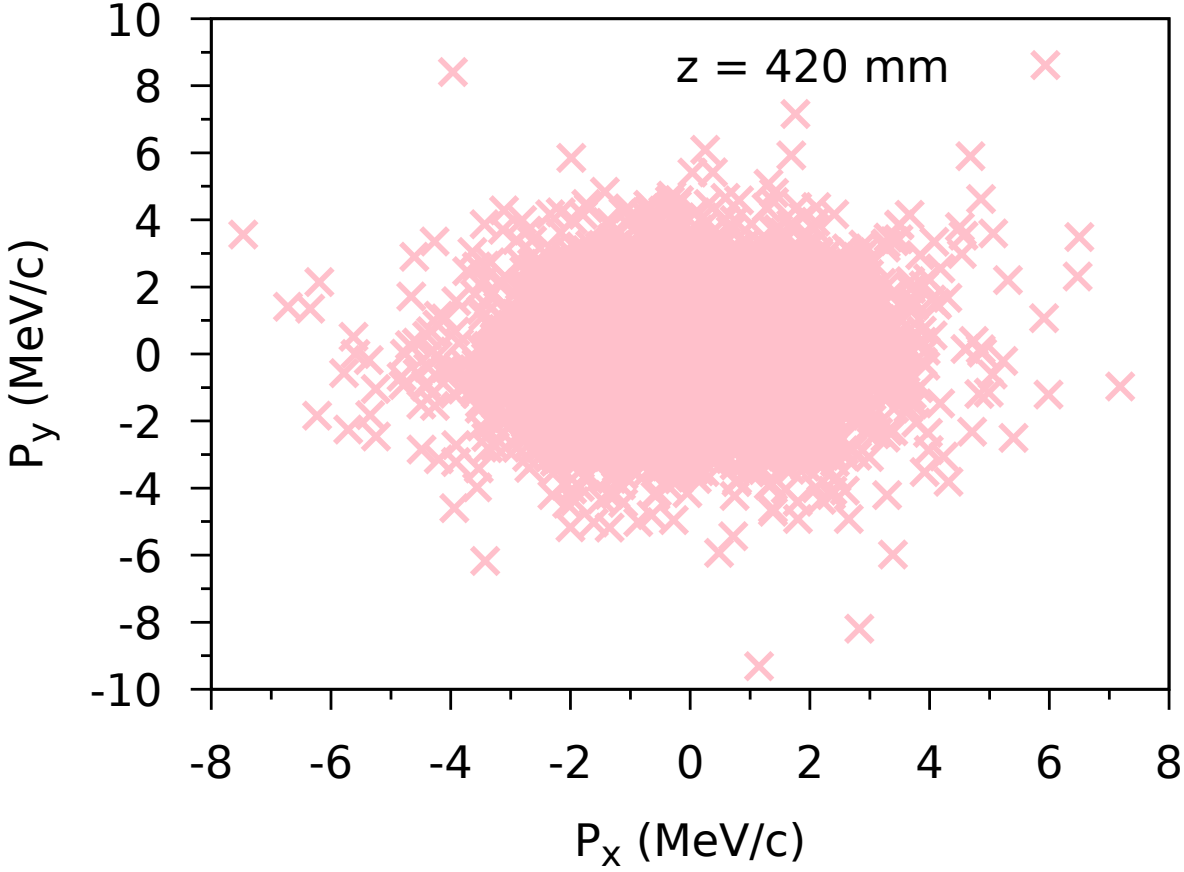

z = 370 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

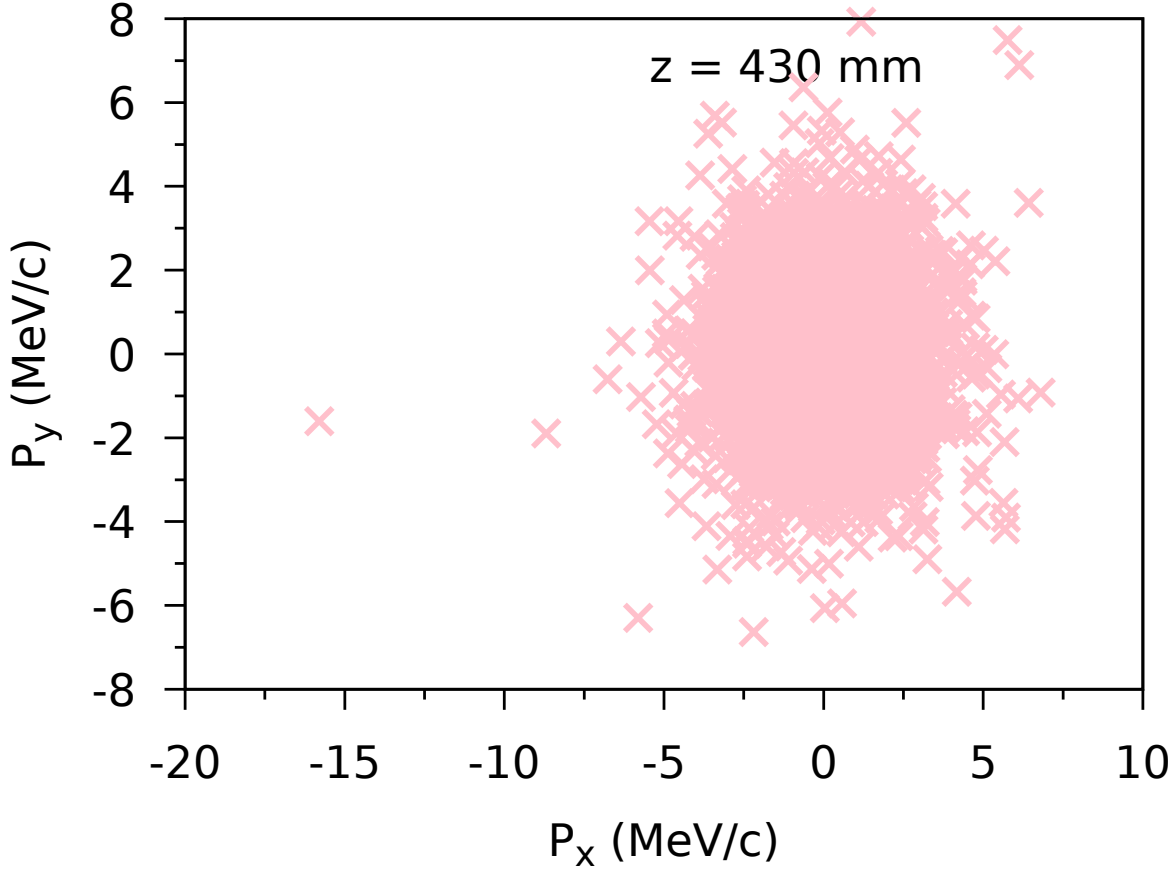

z = 380 mm
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

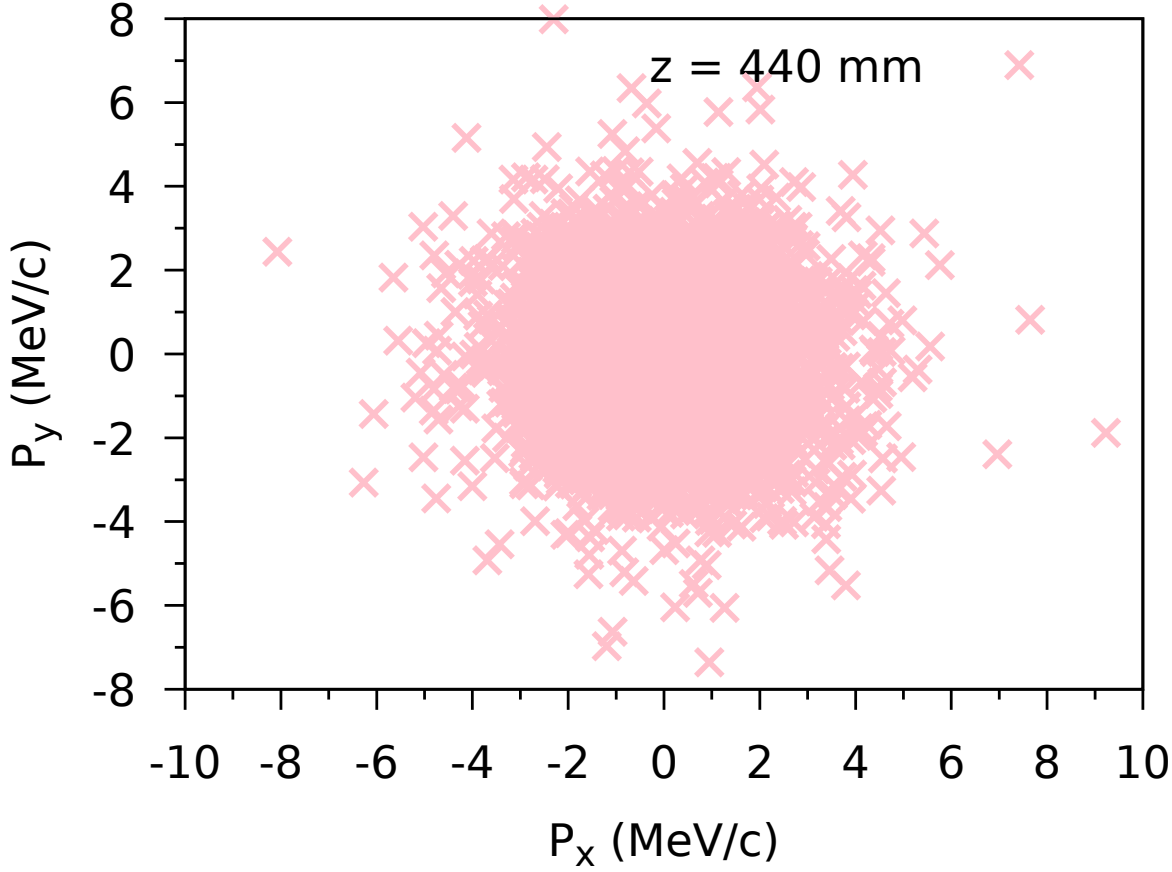

z = 390 mm
10
8
6
4
2
0
-2
-4
-6
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

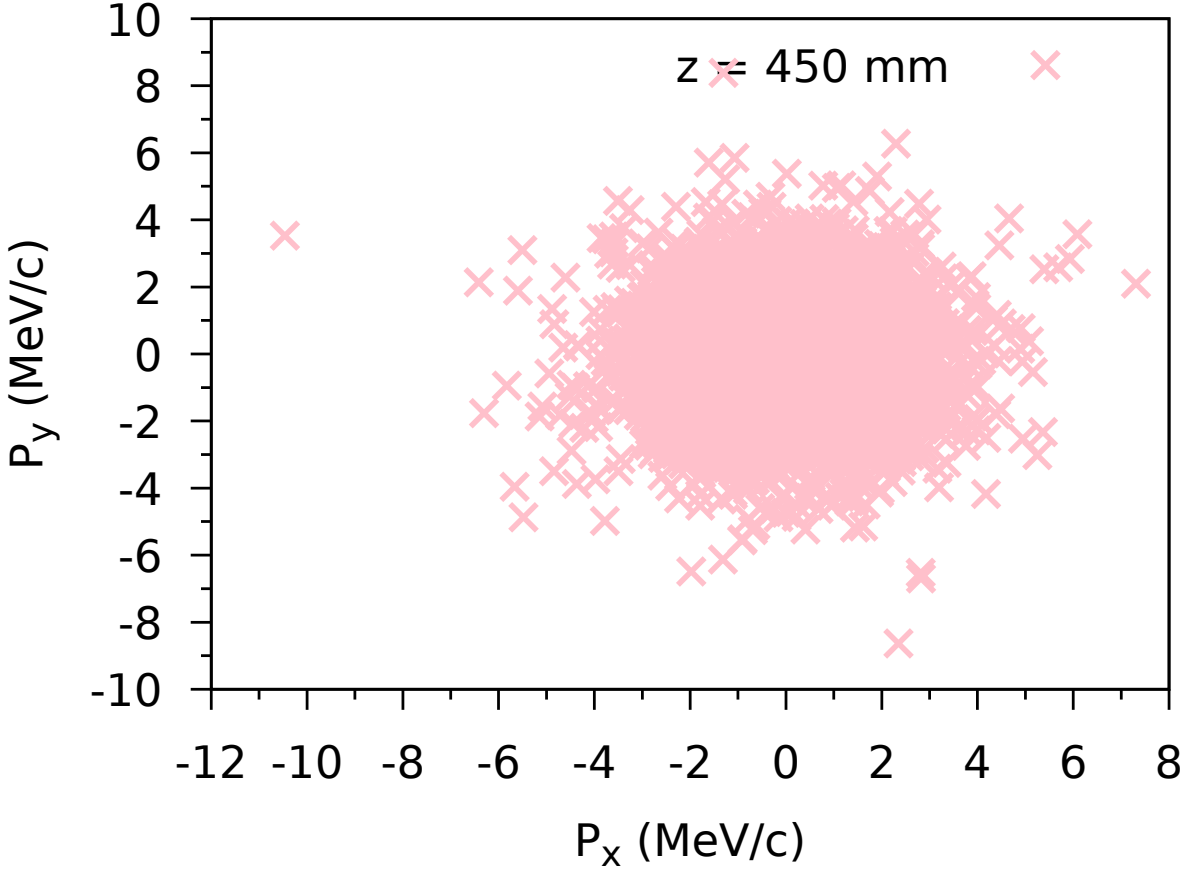

z = 400 mm
10
8
6
4
2
0
-2
-4
-6
-8
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

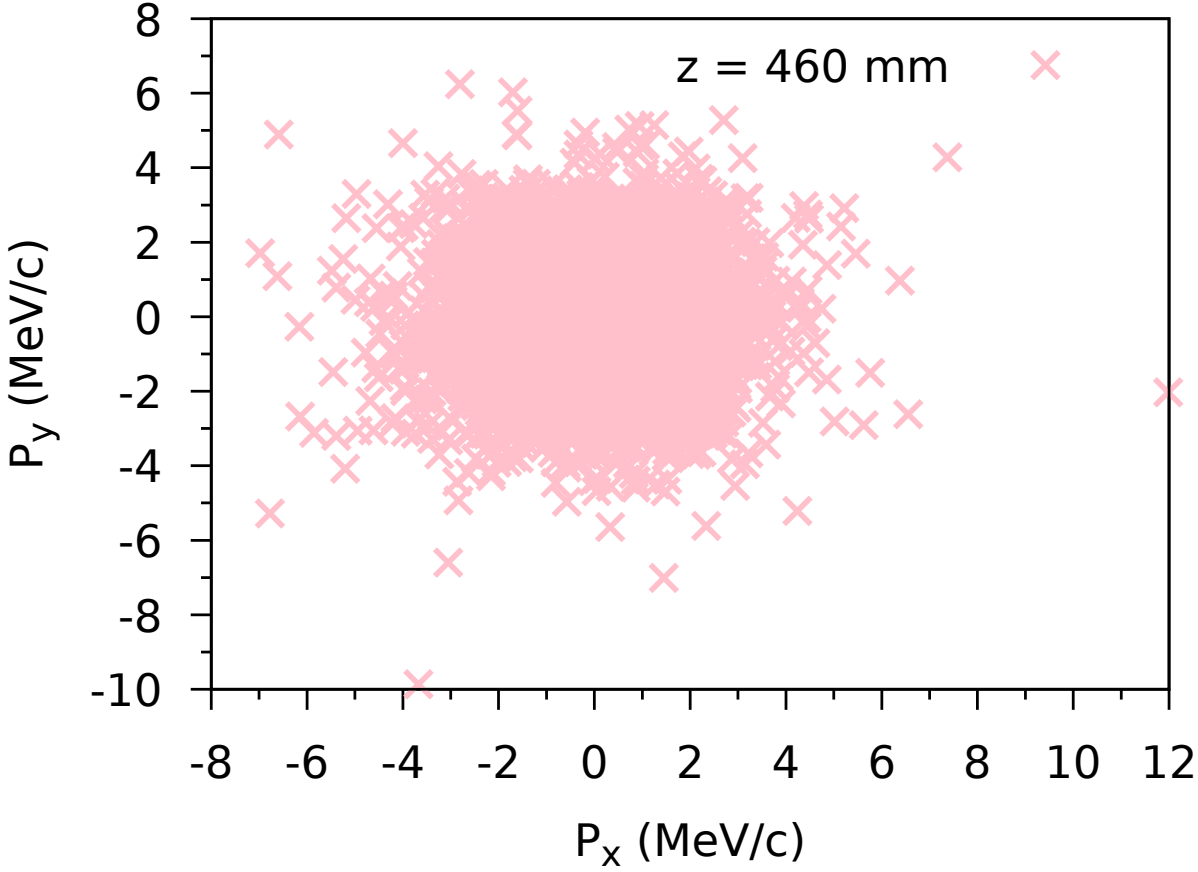

z = 410 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

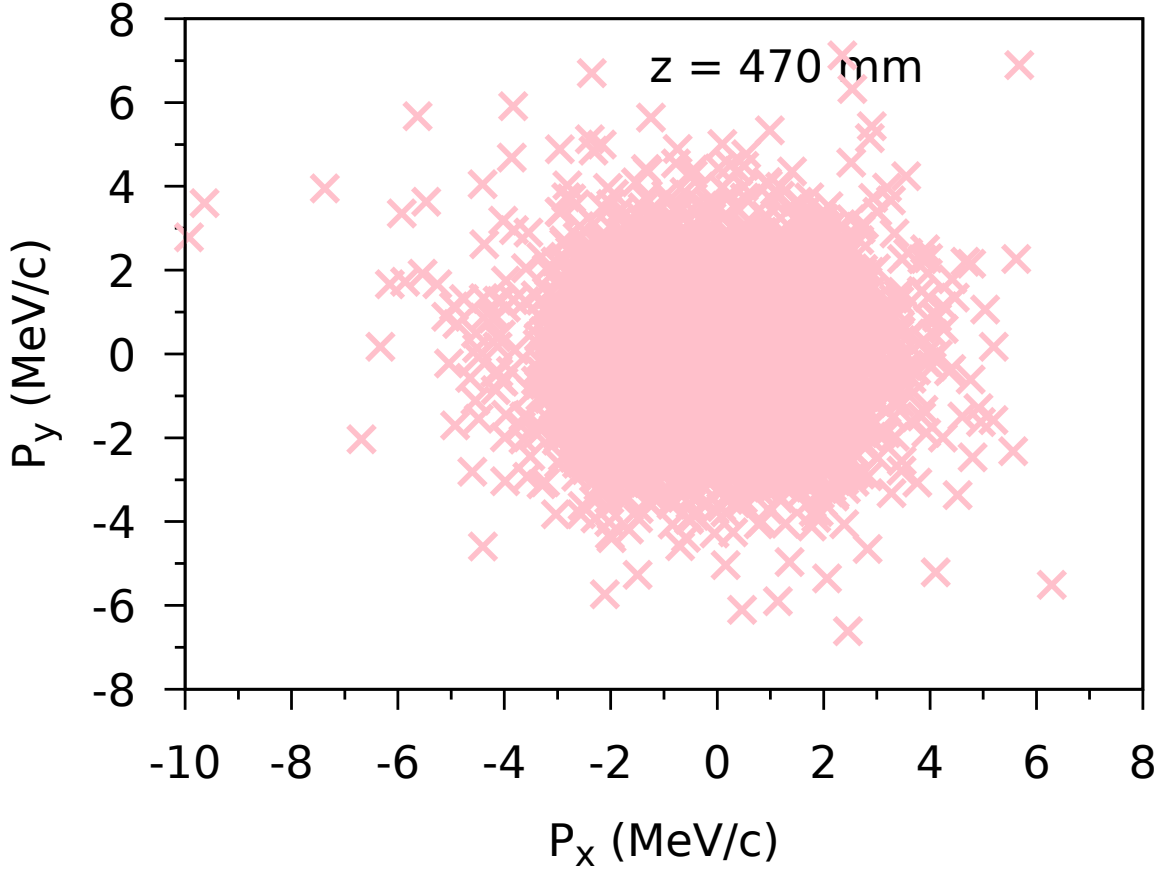

z = 420 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

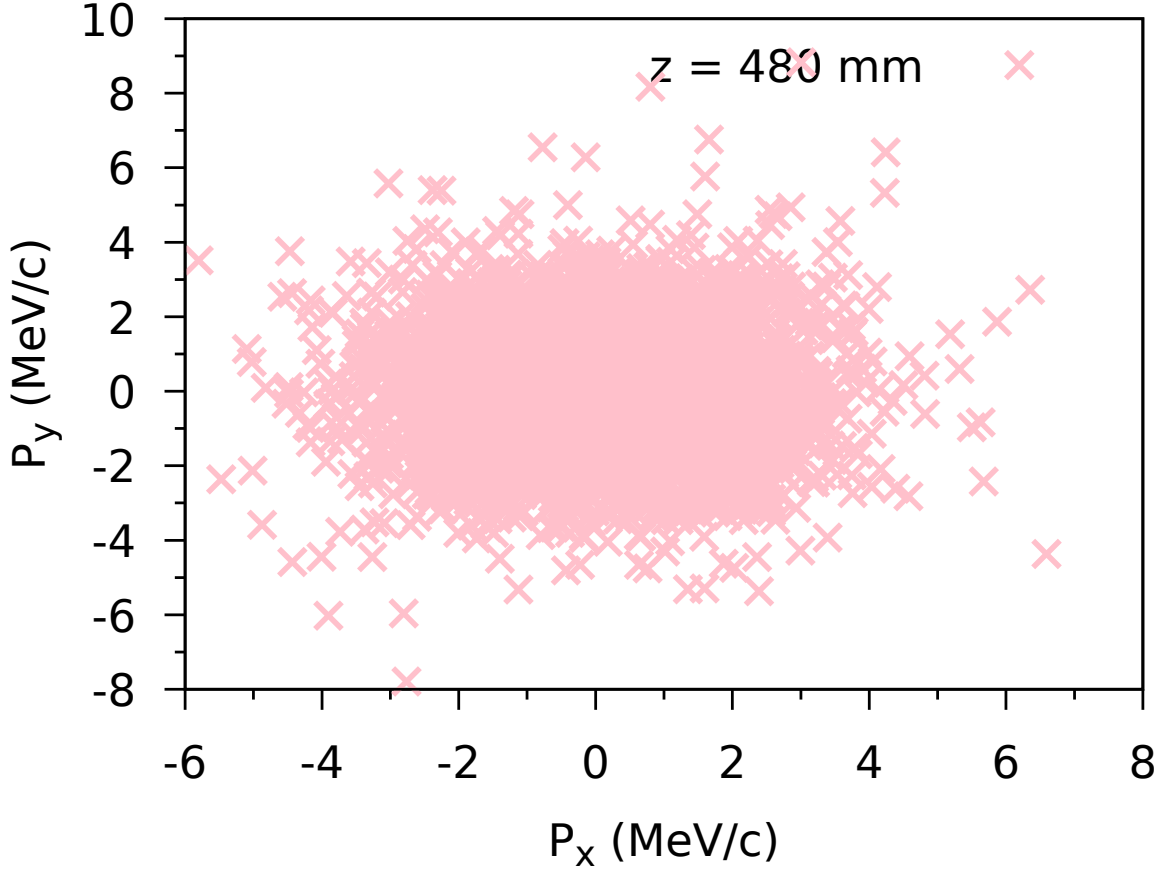

z = 430 mm
8
6
4
2
0
-2
-4
-6
-8
P_y (MeV/c)
-20
-15
-10
-5
0
5
10
P_x (MeV/c)

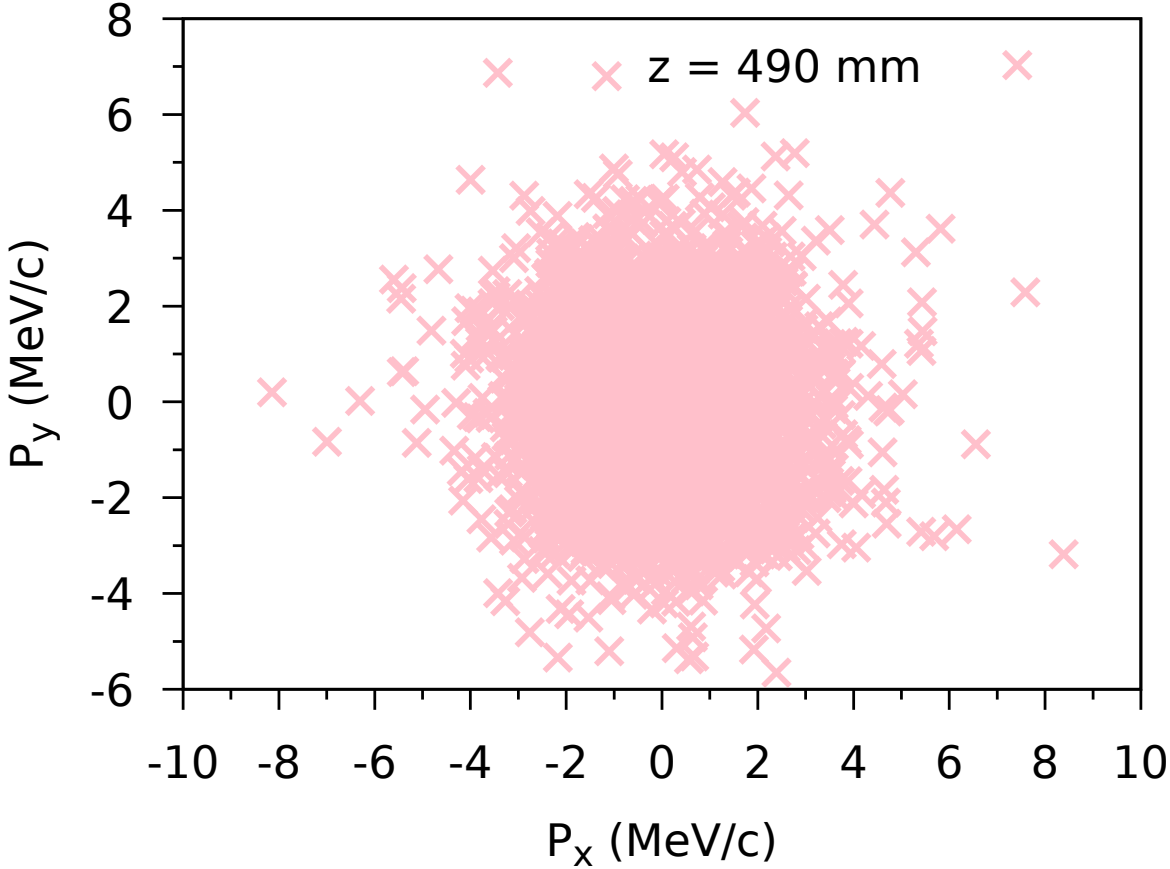

z = 440 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)

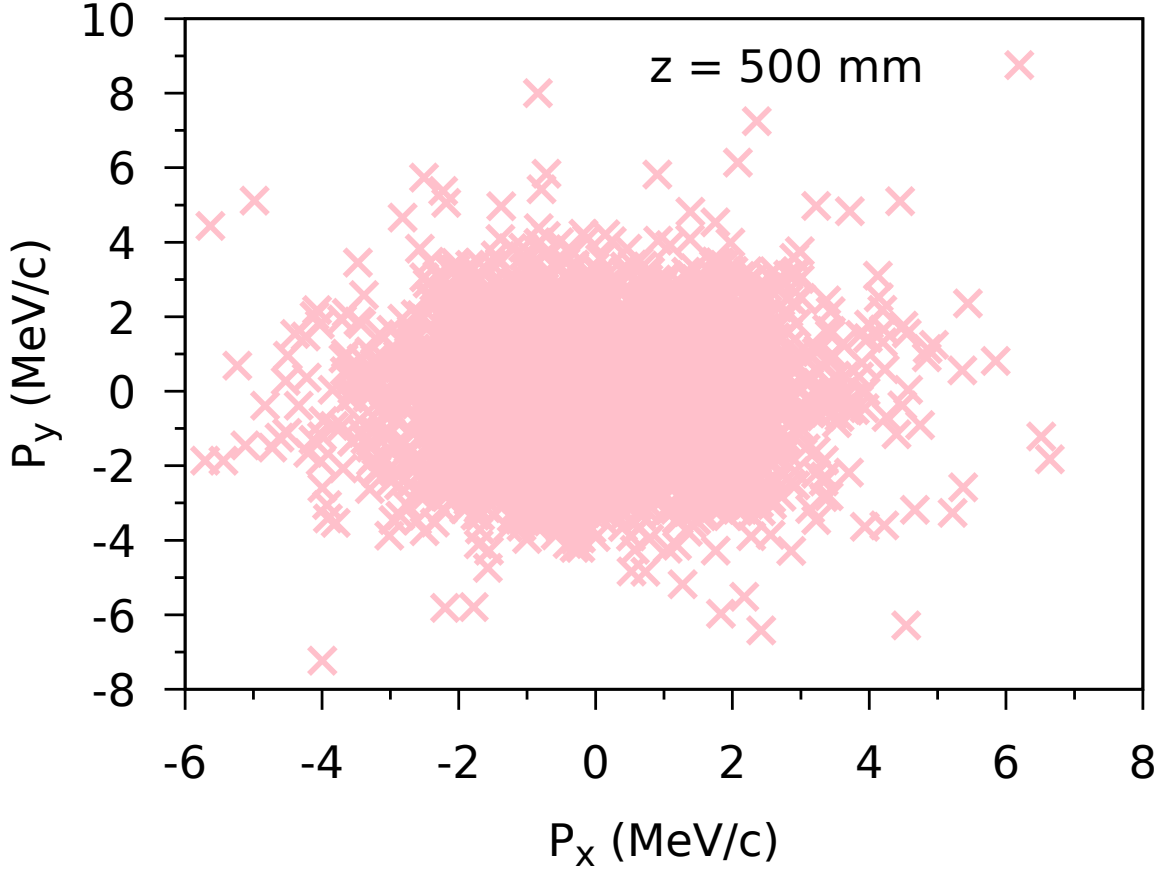

z = 450 mm
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)

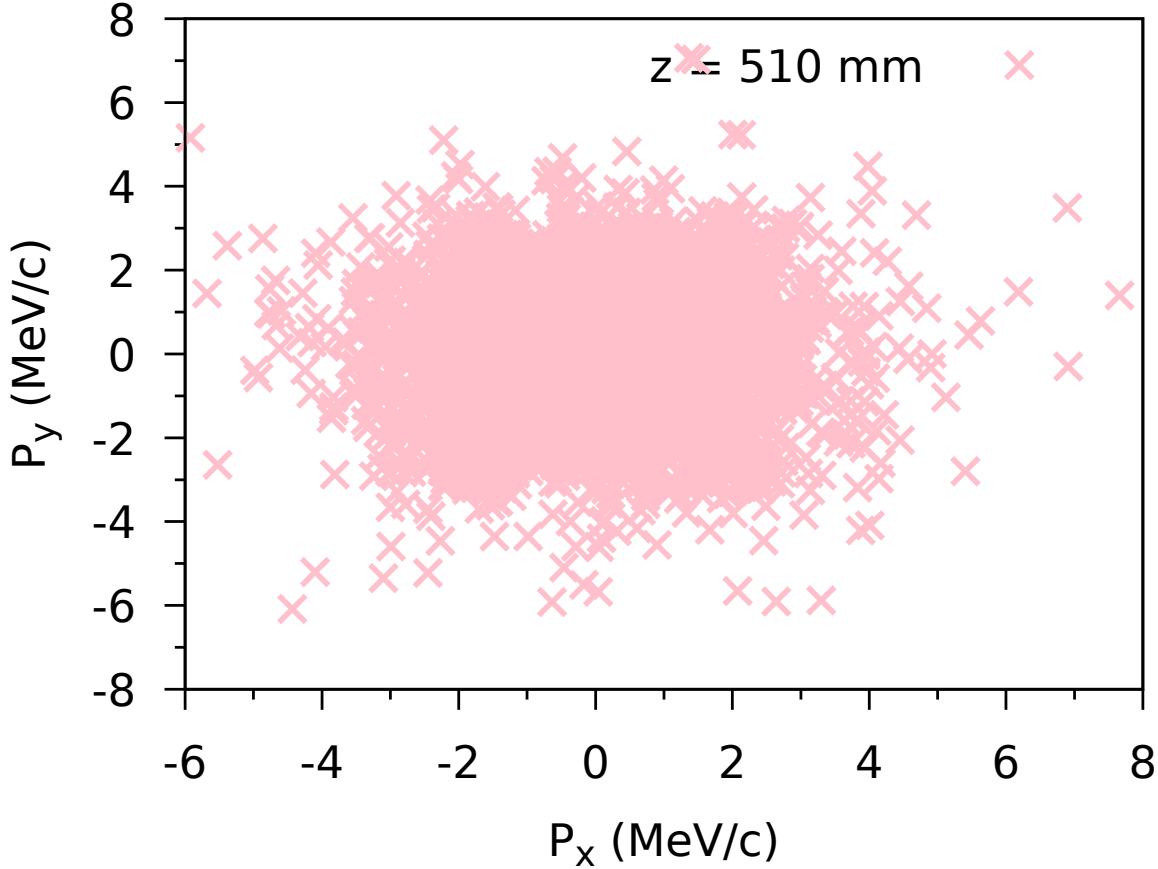

z = 460 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
P_y (MeV/c)
P_x (MeV/c)


z = 470 mm
8
6
4
2
0
-2
-4
-6
-8
-10
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)


z = 480 mm
10
8
6
4
2
0
-2
-4
-6
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)


z = 490 mm
8
6
4
2
0
-2
-4
-6
-10
-8
-6
-4
-2
0
2
4
6
8
10
P_y (MeV/c)
P_x (MeV/c)


z = 500 mm
10
8
6
4
2
0
-2
-4
-6
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)


z = 510 mm
8
6
4
2
0
-2
-4
-6
-8
-6
-4
-2
0
2
4
6
8
P_y (MeV/c)
P_x (MeV/c)