Beamline Operation

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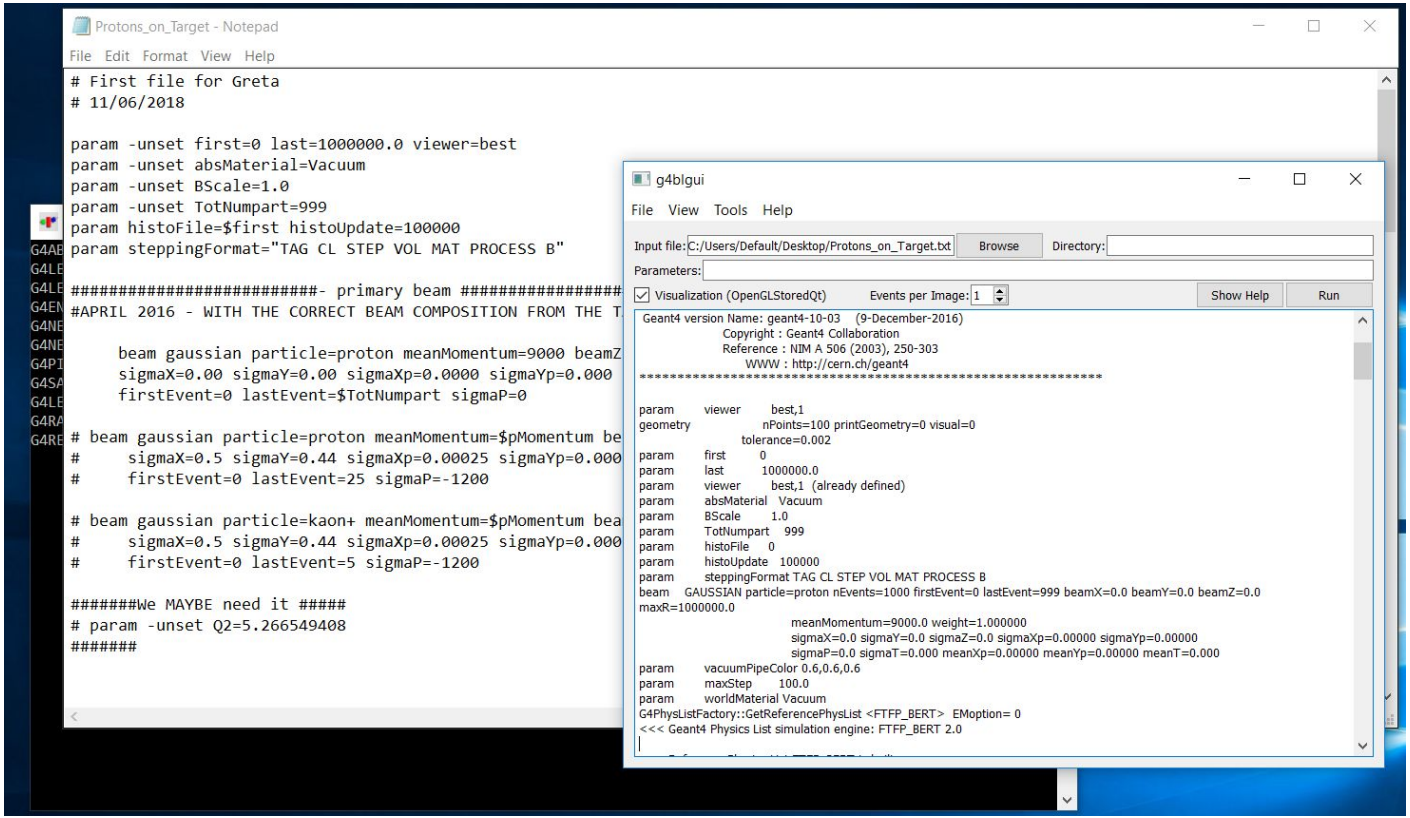
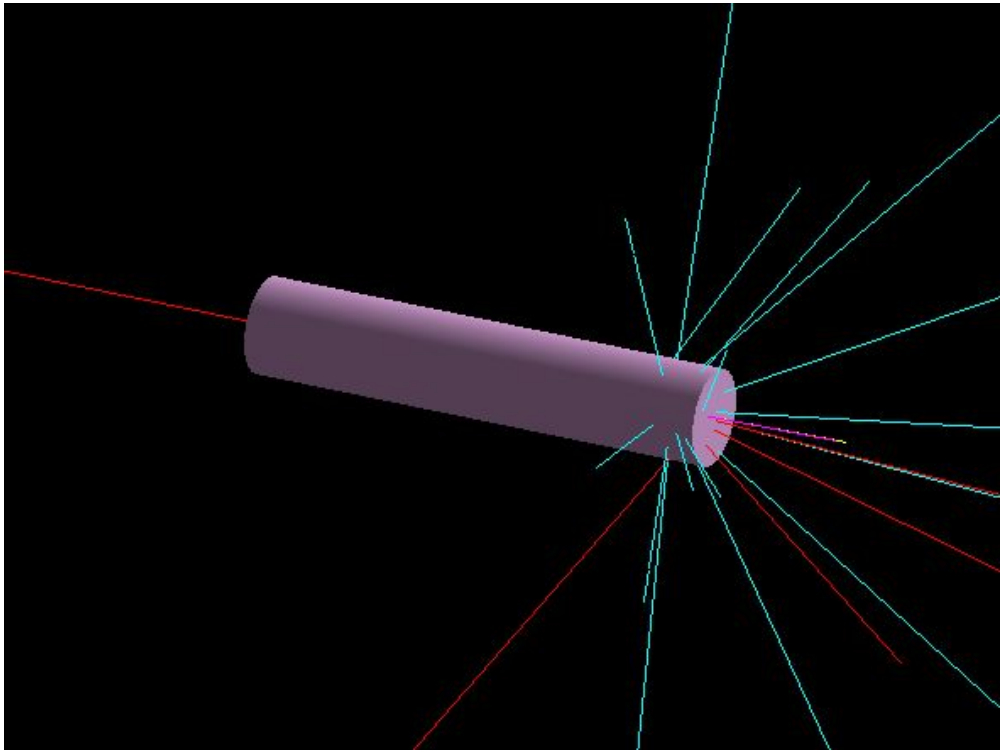
Supervisor: Nikolaos Charitonidis

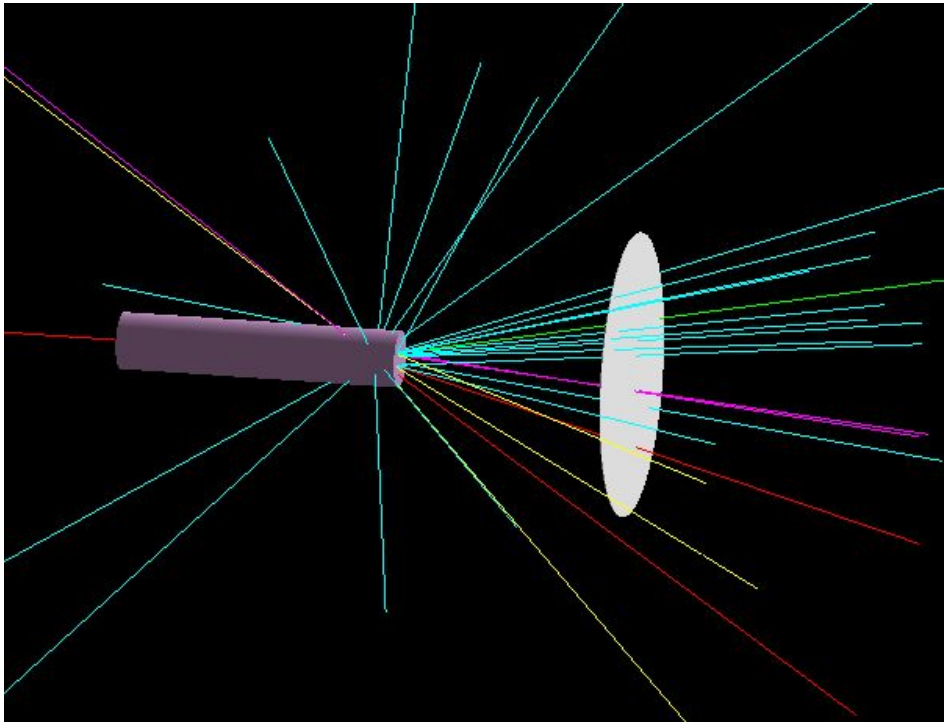
G4beamline - simulation of beams

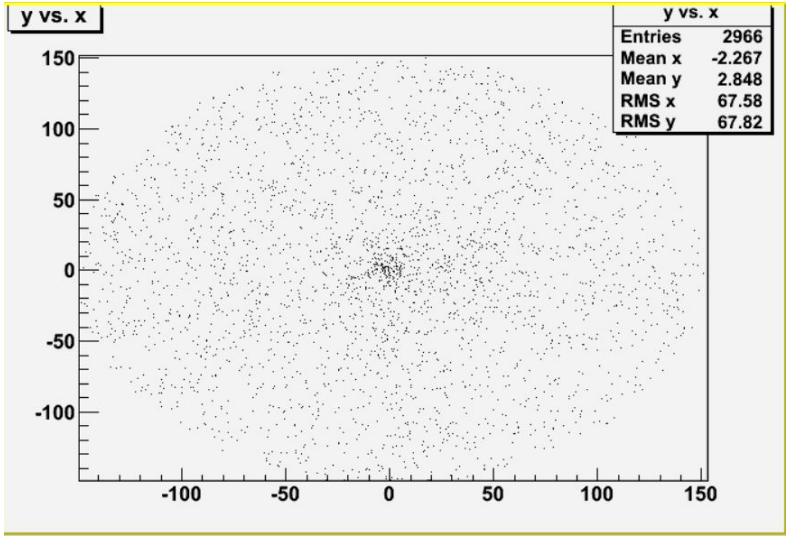


Protons and target (Cu)

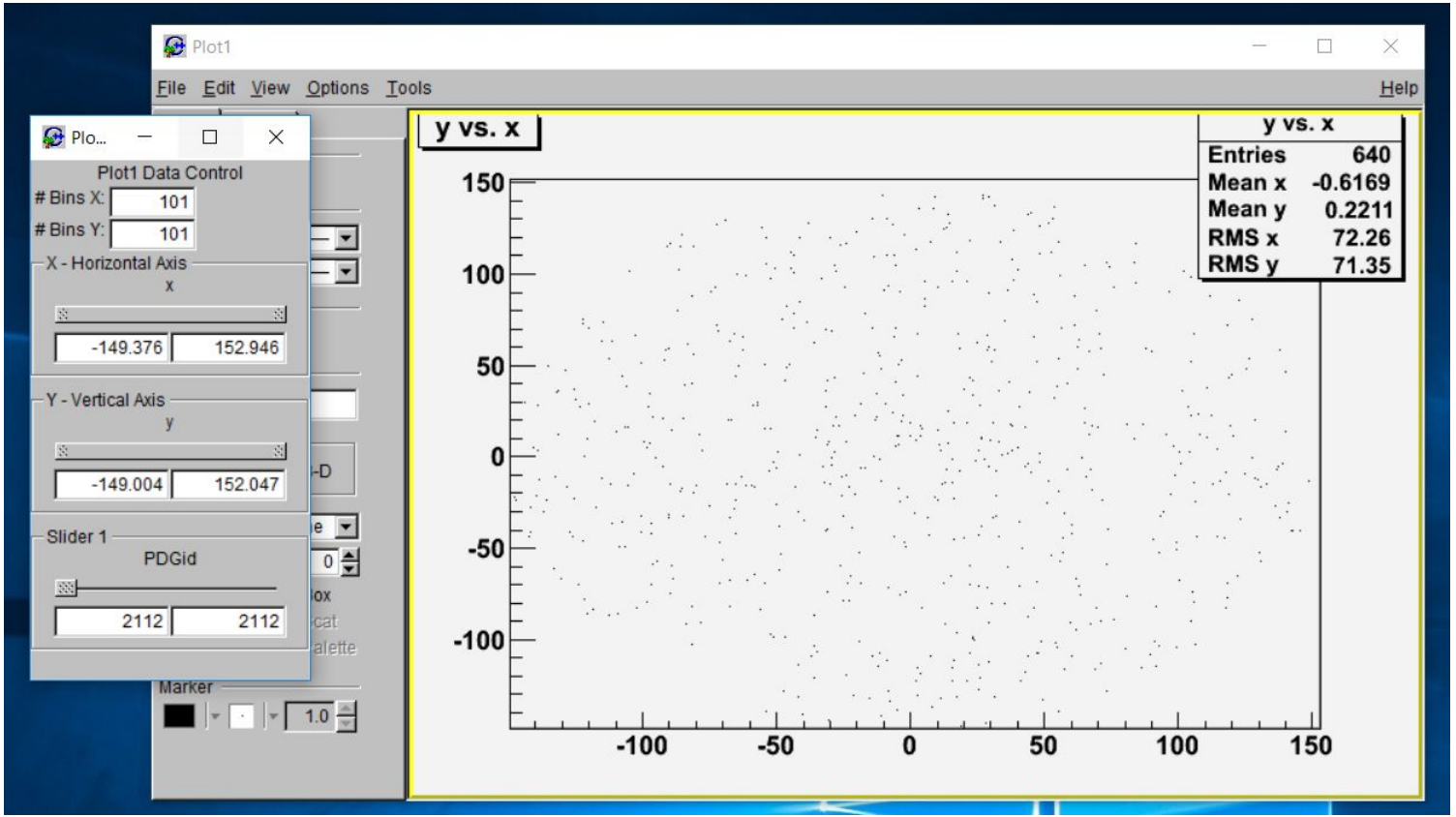


Virtual detectors and HistoRoot

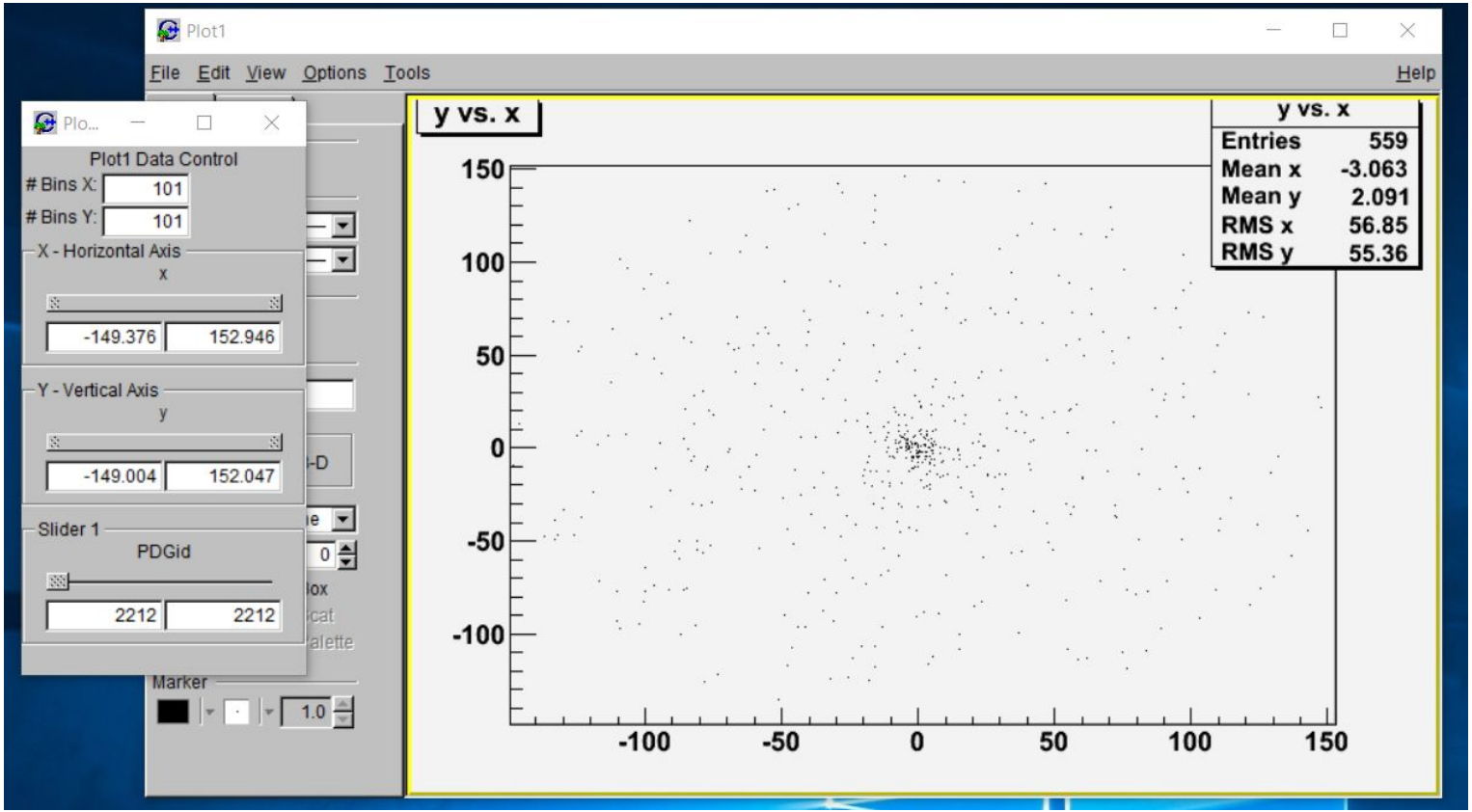




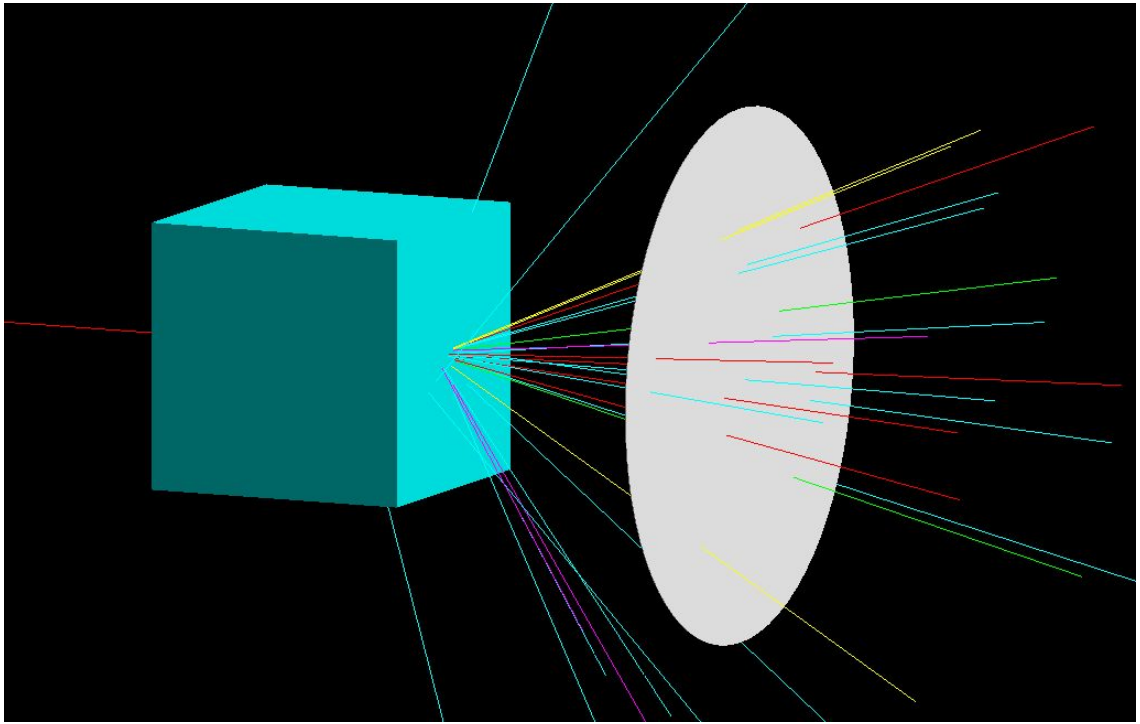
Positions of neutrons



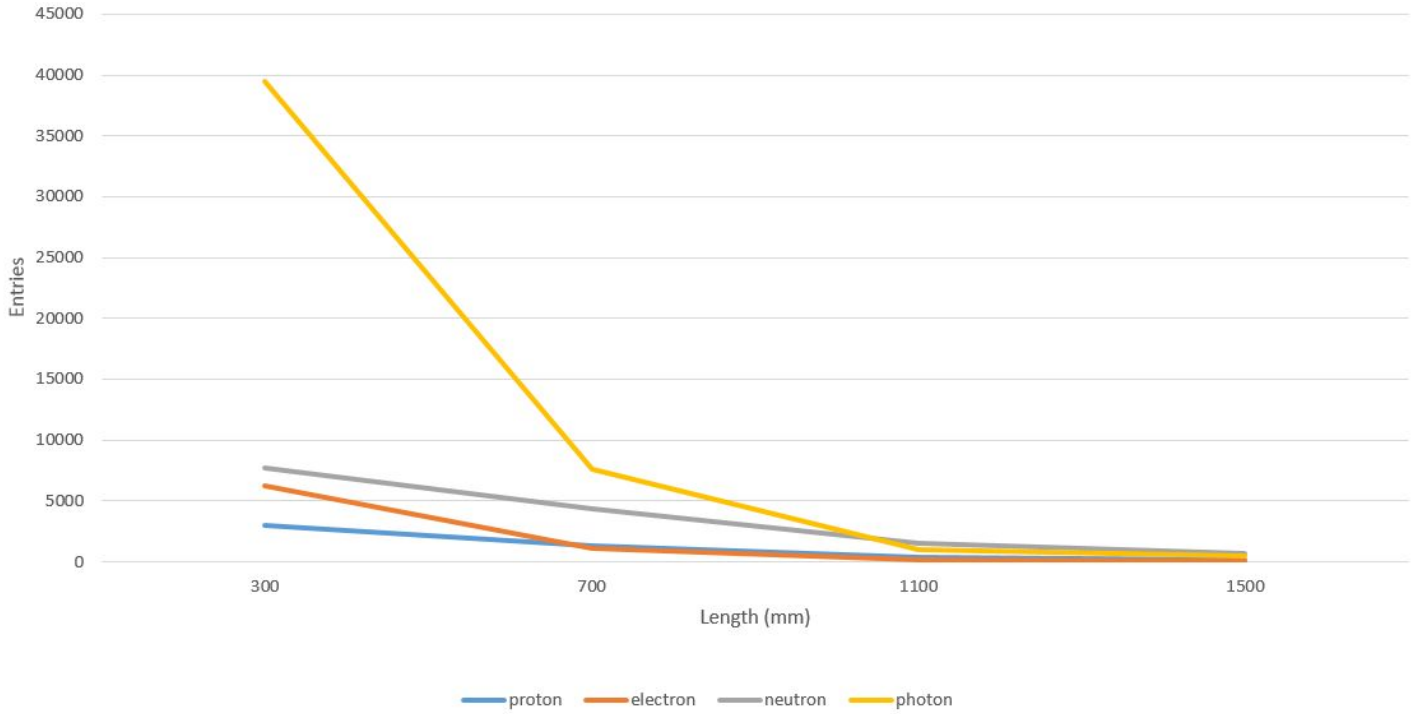
Positions of protons



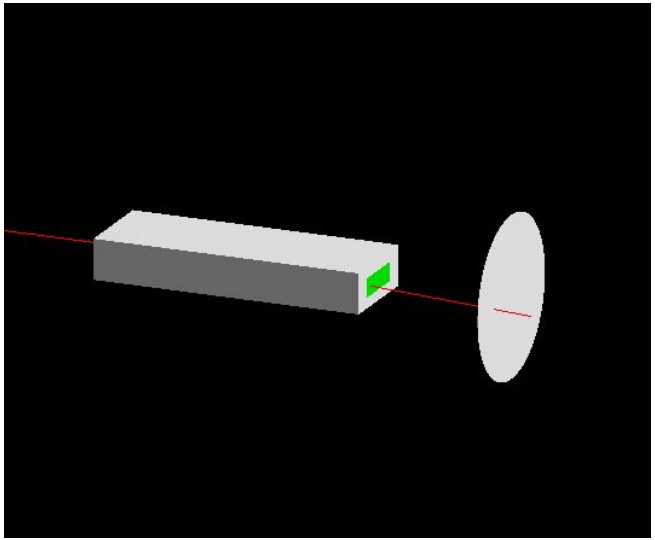
Study of length of target and entries

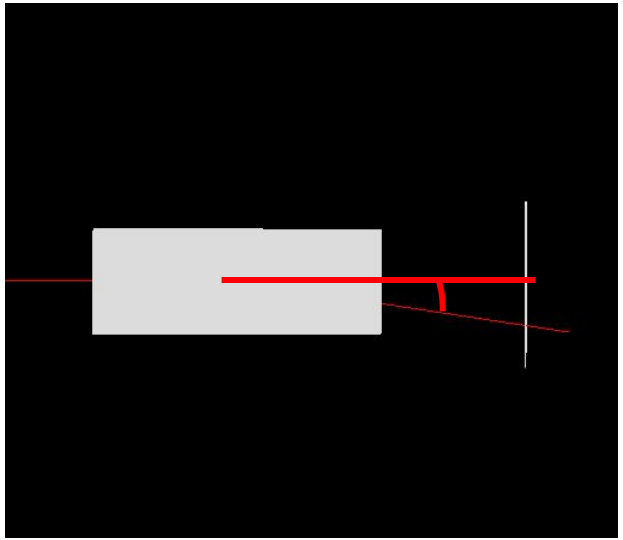


Study of length of target and entries

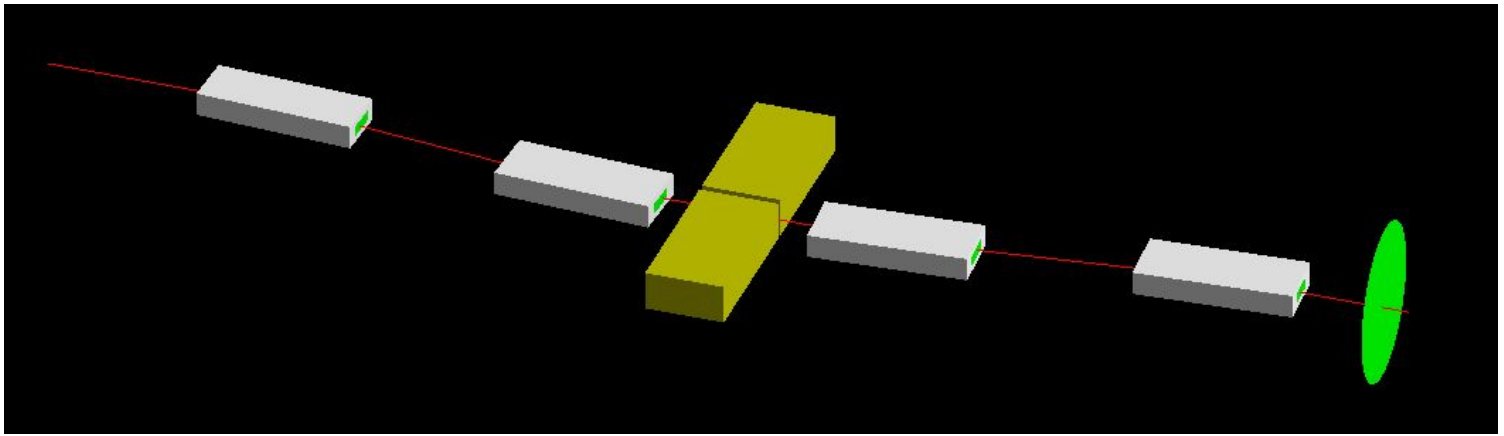


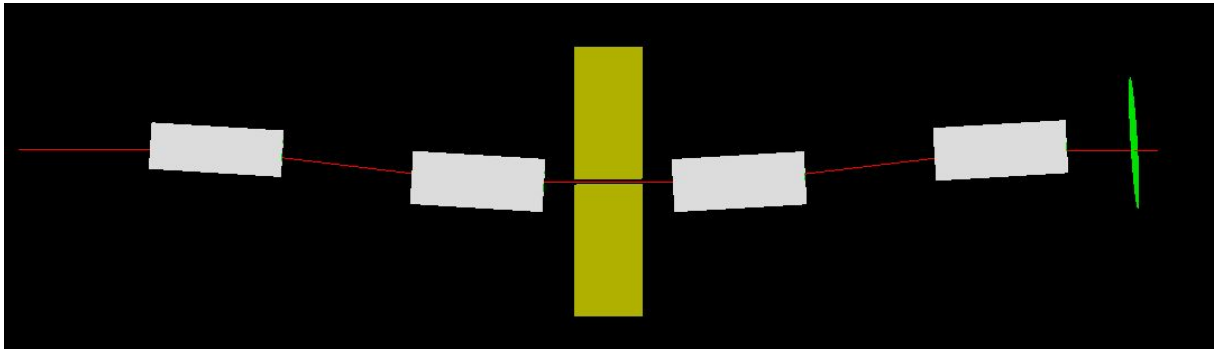
Magnet



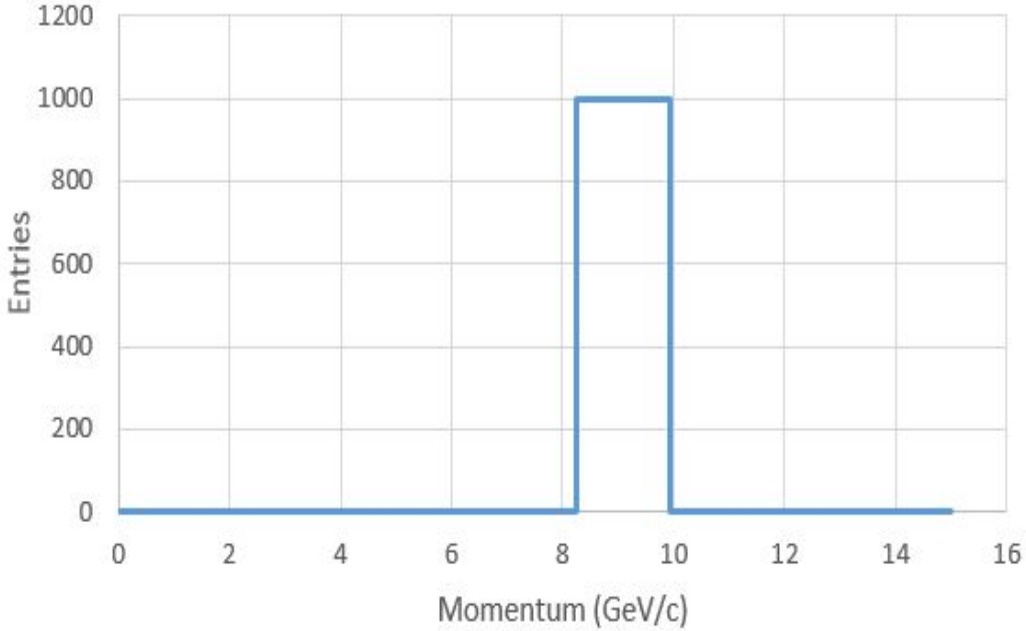


A system

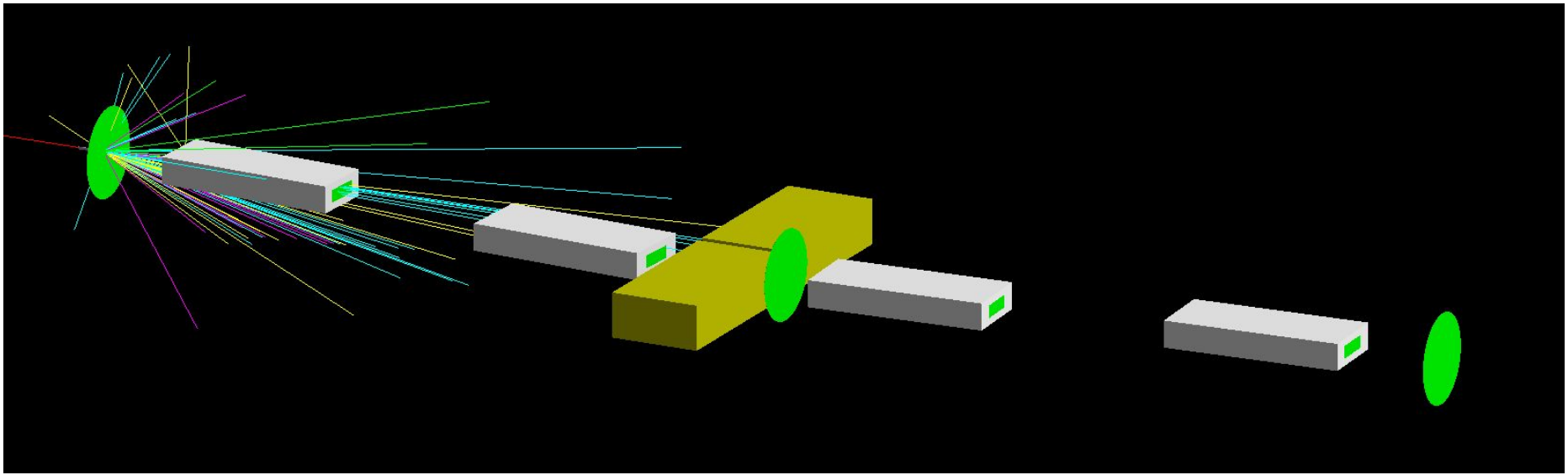




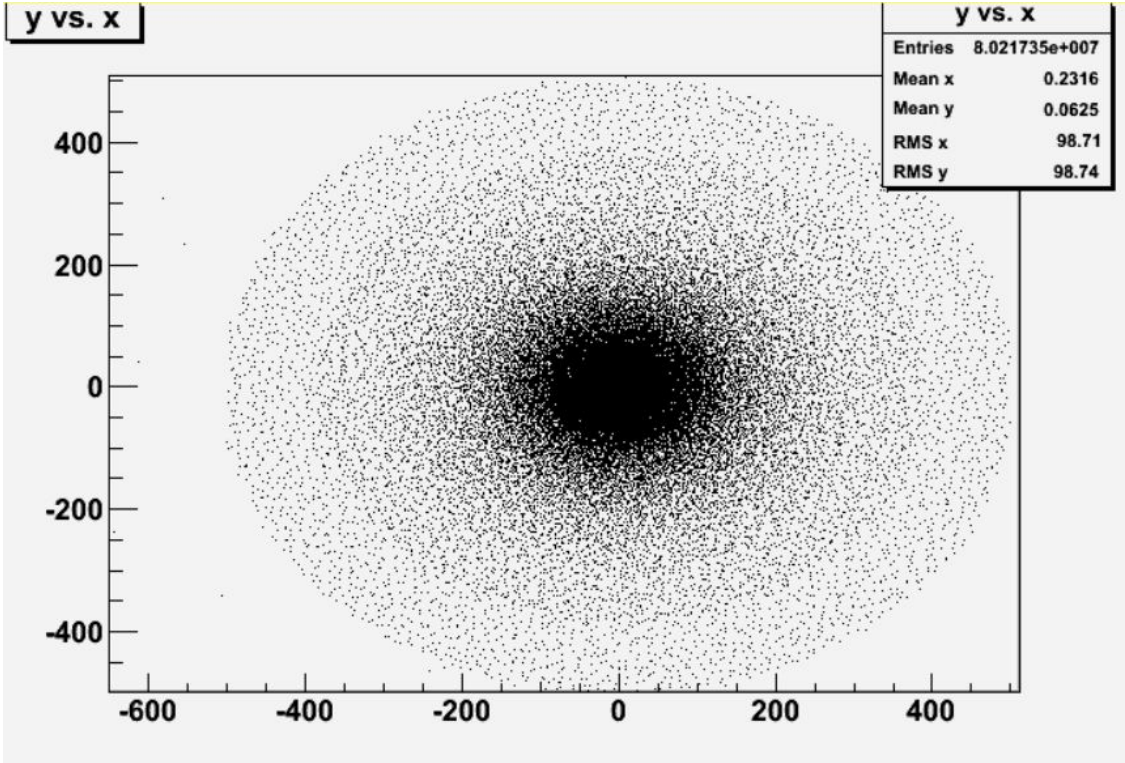
Acceptance



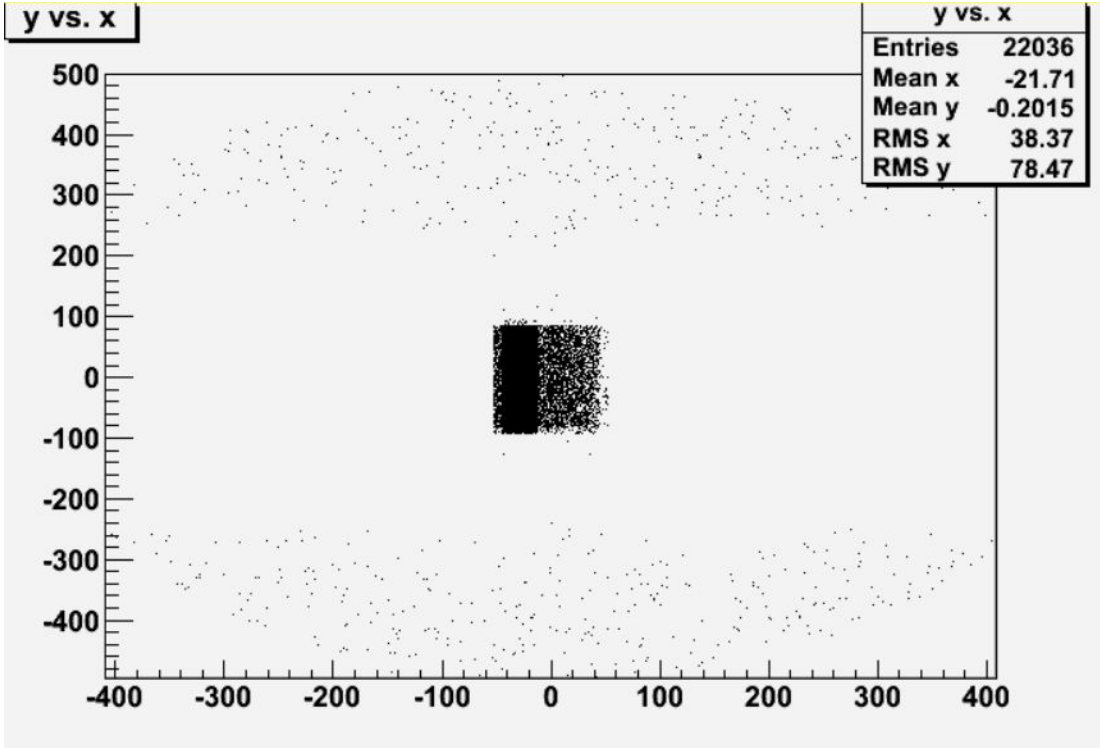
Acceptance=9GeV±8.84%



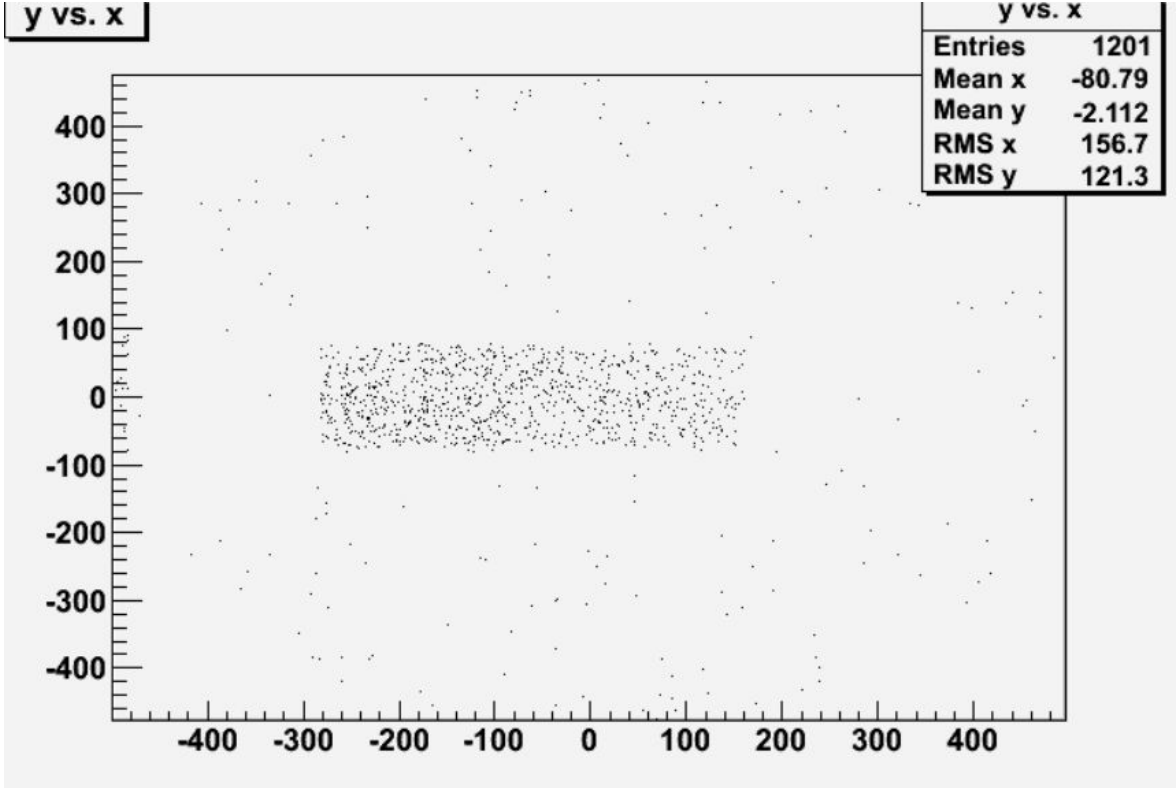
Detector 1


y vs. x
y vs. x
Entries 8.021735e+007
Mean x 0.2316
Mean y 0.0625
RMS x 98.71
RMS y 98.74
400
200
0
-200
-400
-600
-400
-200
0
200
400

Detector 2


y vs. x
y vs. x
Entries 22036
Mean x -21.71
Mean y -0.2015
RMS x 38.37
RMS y 78.47
500
400
300
200
100
0
-100
-200
-300
-400
-400
-300
-200
-100
0
100
200
300
400

Detector 3


y vs. x
y vs. x
Entries 1201
Mean x -80.79
Mean y -2.112
RMS x 156.7
RMS y 121.3
400
300
200
100
0
-100
-200
-300
-400
-400 -300 -200 -100 0 100 200 300 400

How has it been?