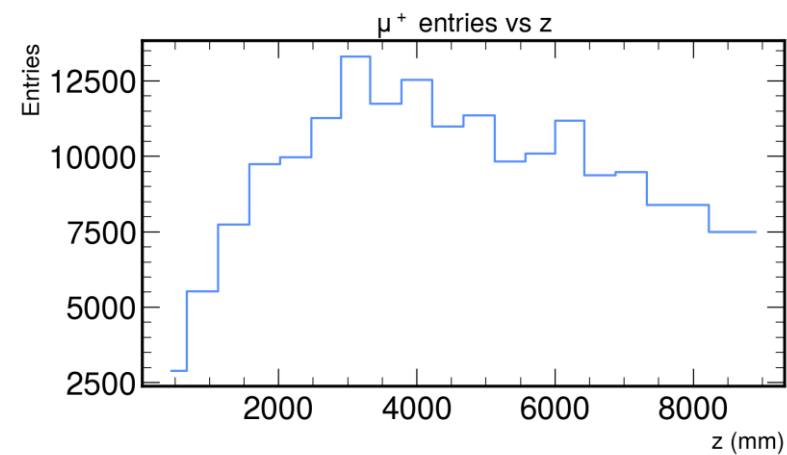
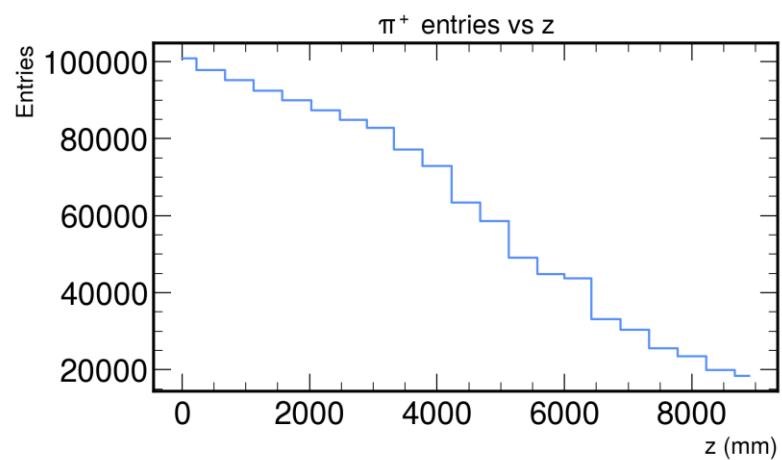
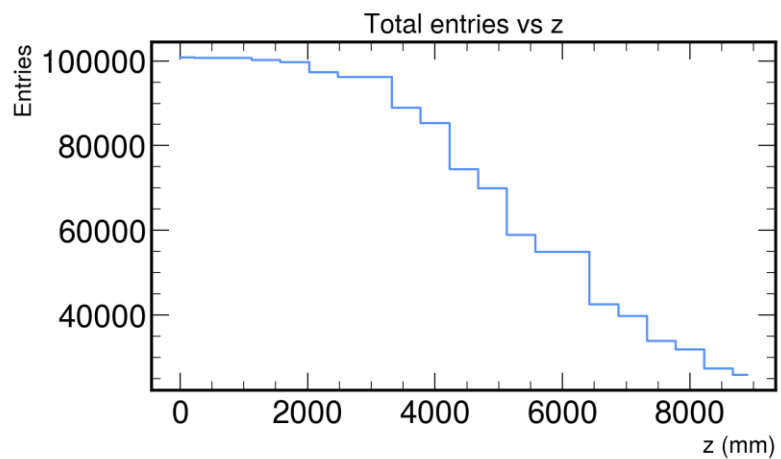
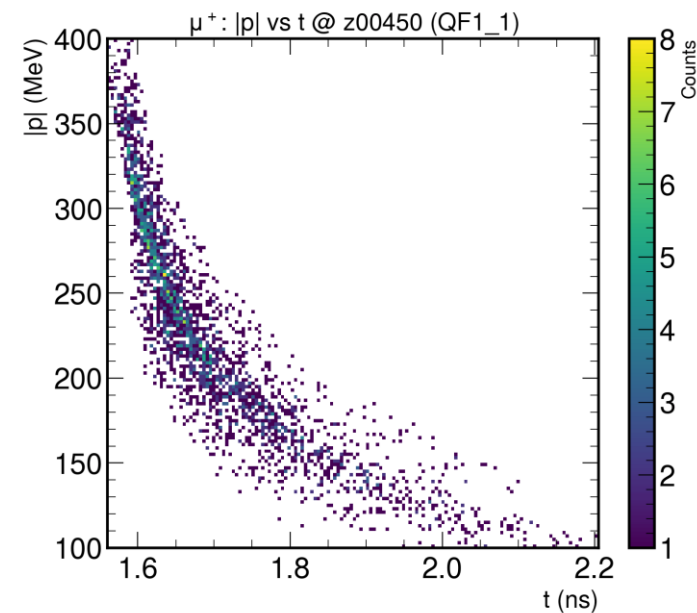
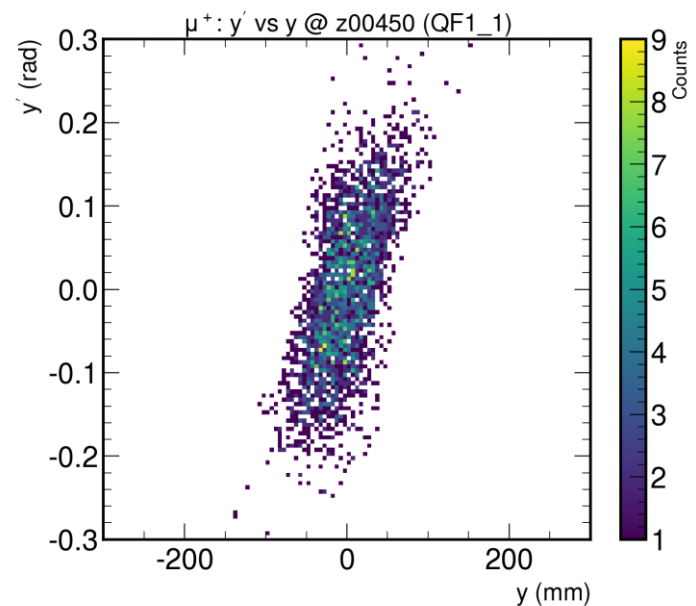
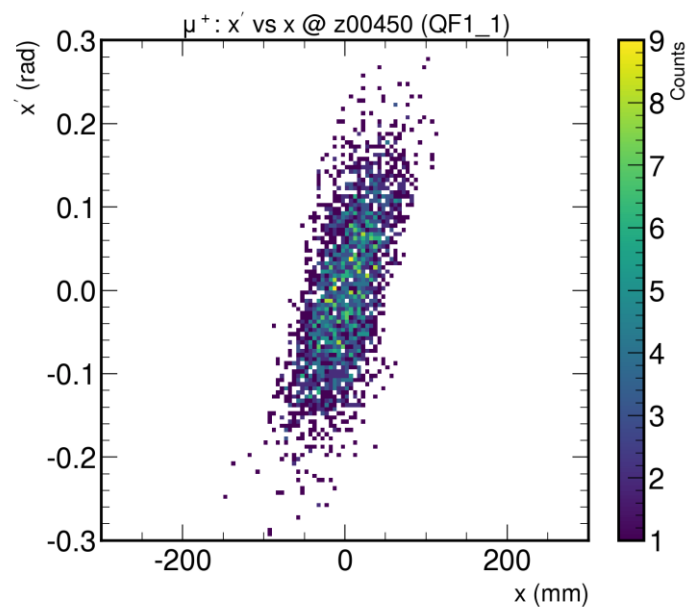
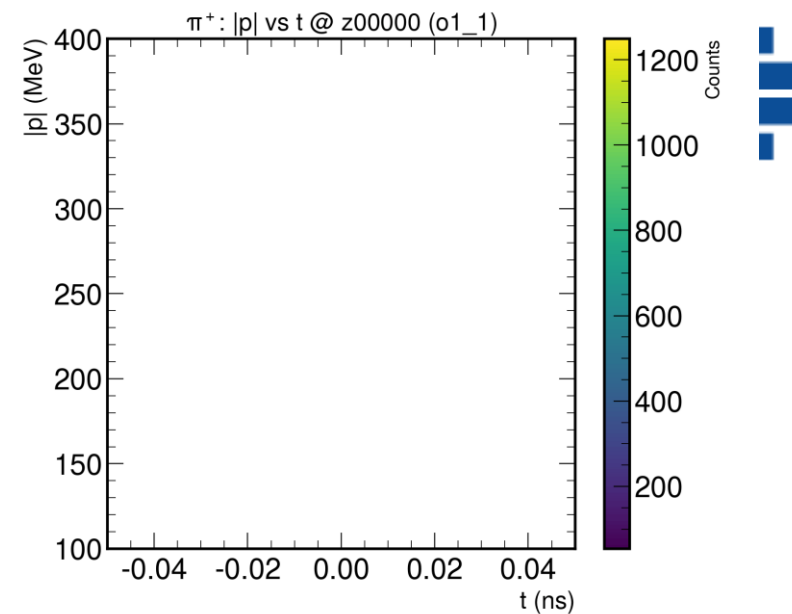
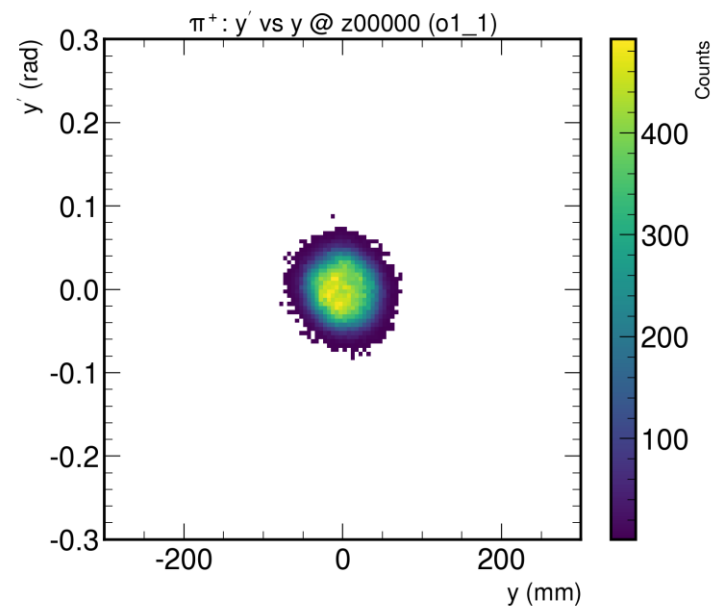
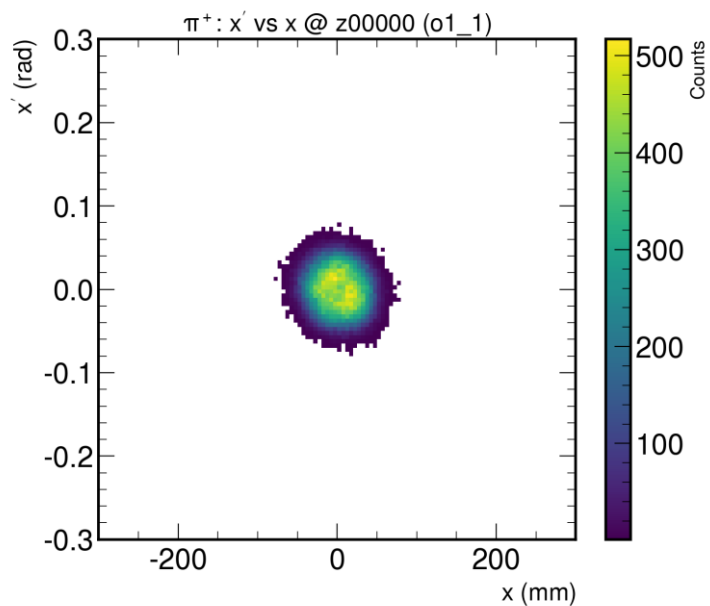
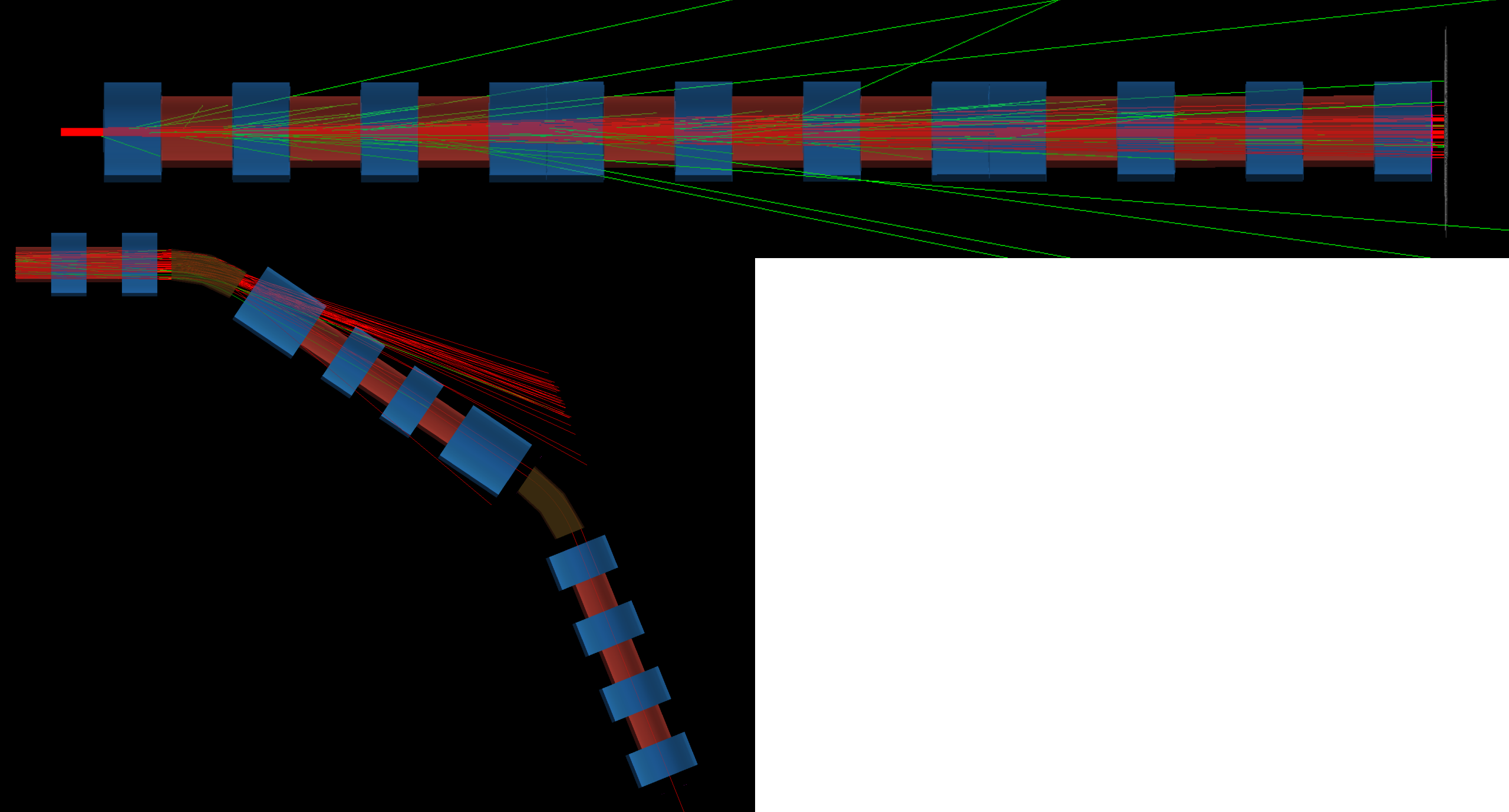


Studies on Muon Collider's Target with G4Beamline (12/08/2025)

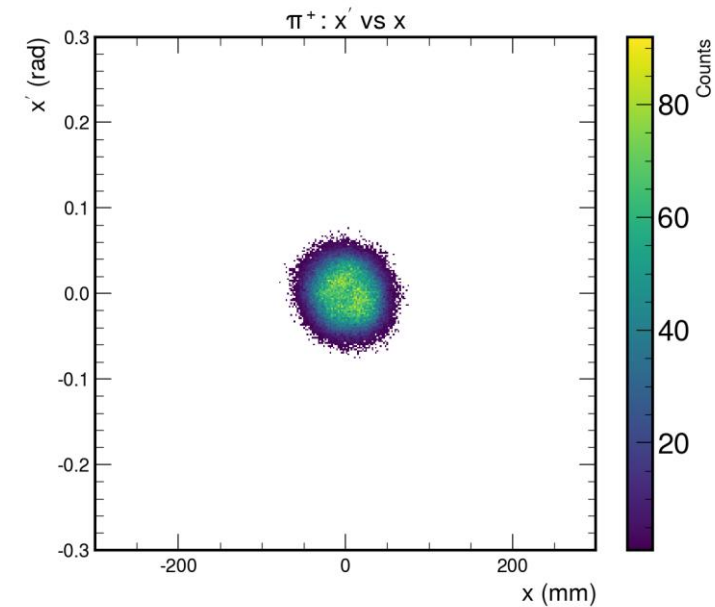
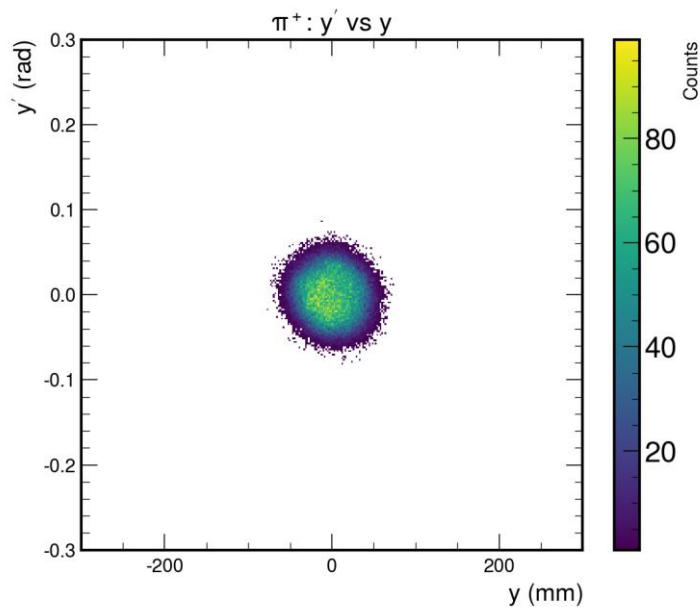
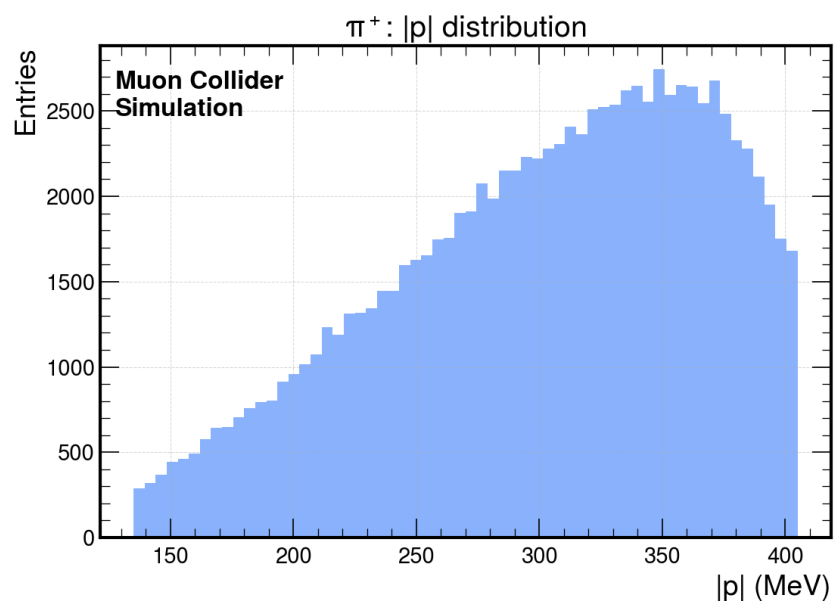
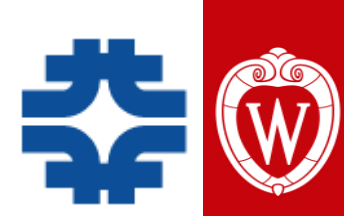
Cheng-Hsu (Bryan) Nee



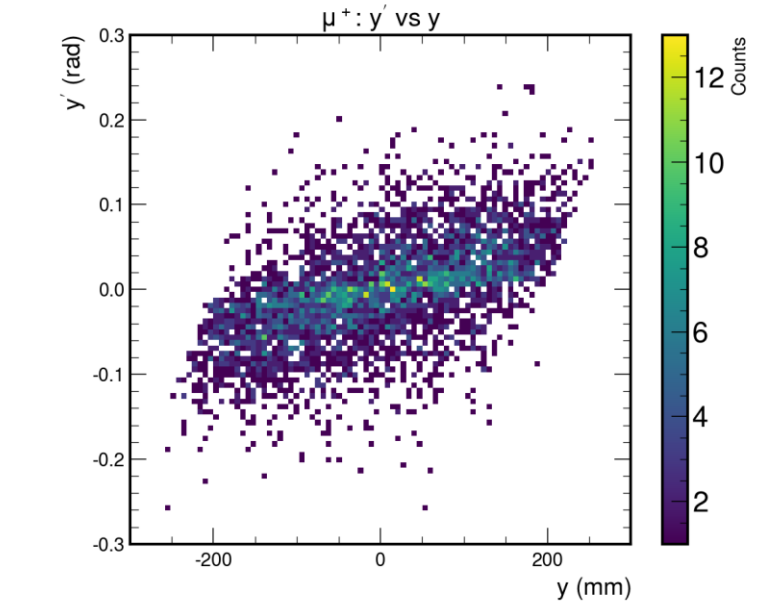
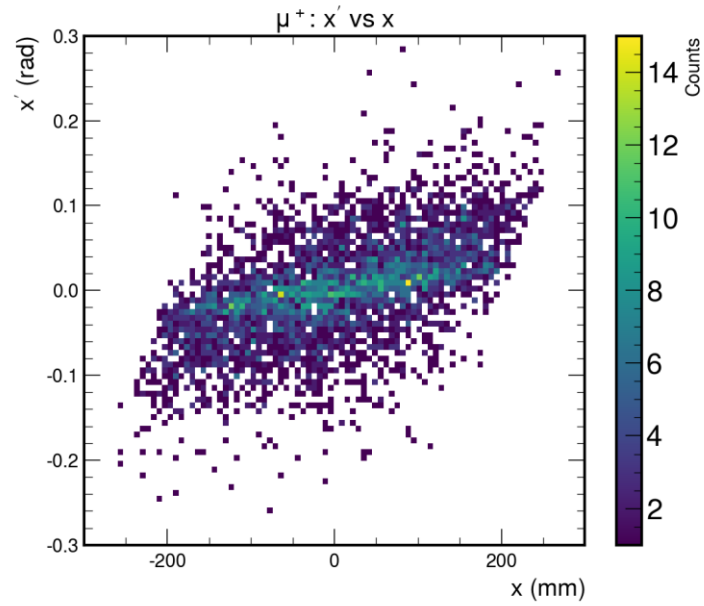
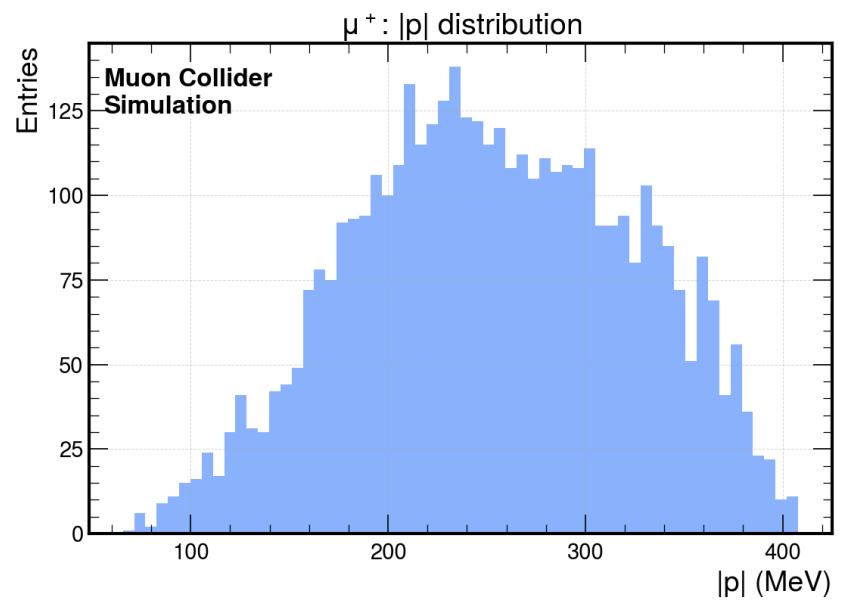
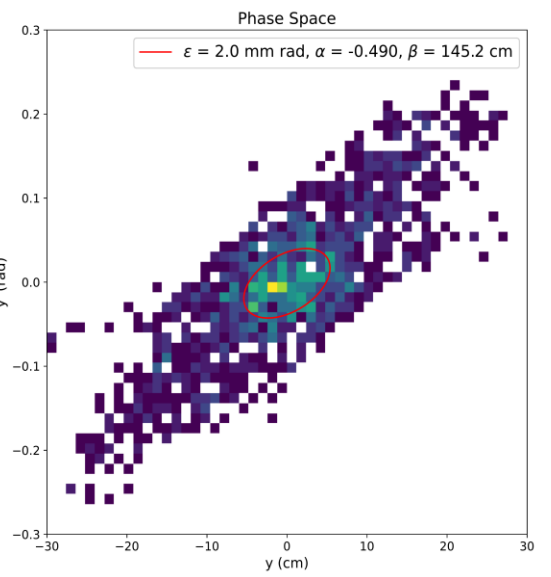
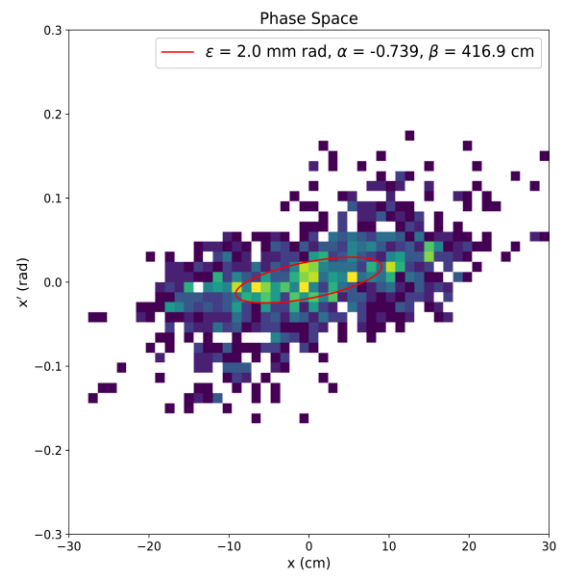
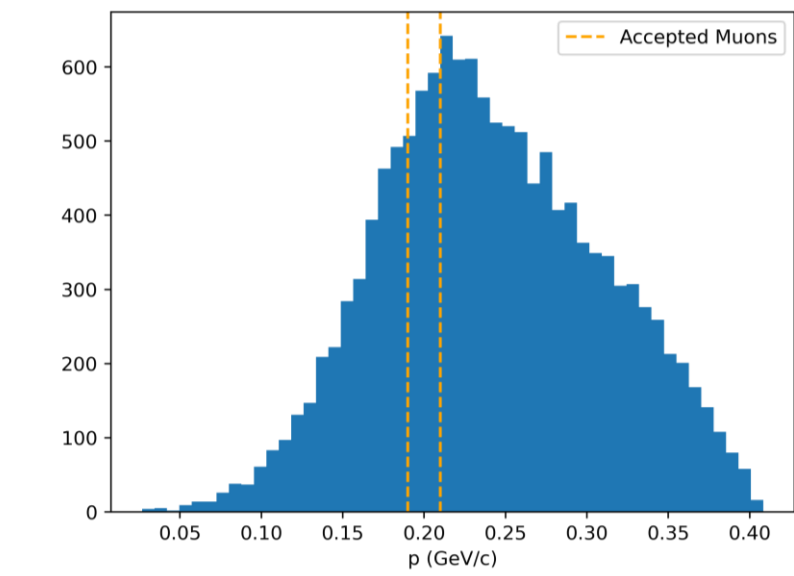
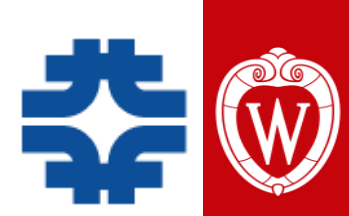




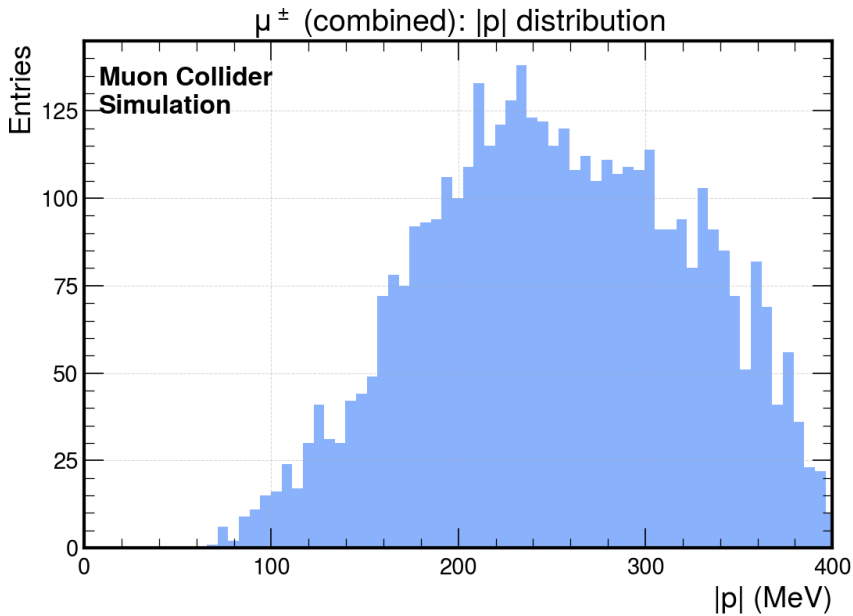
Convert BDSIM Input to G4Beamline Input



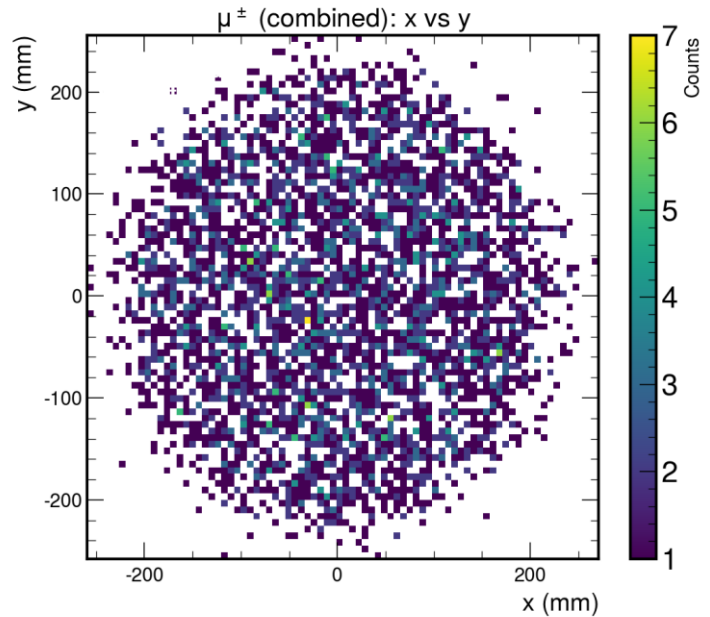
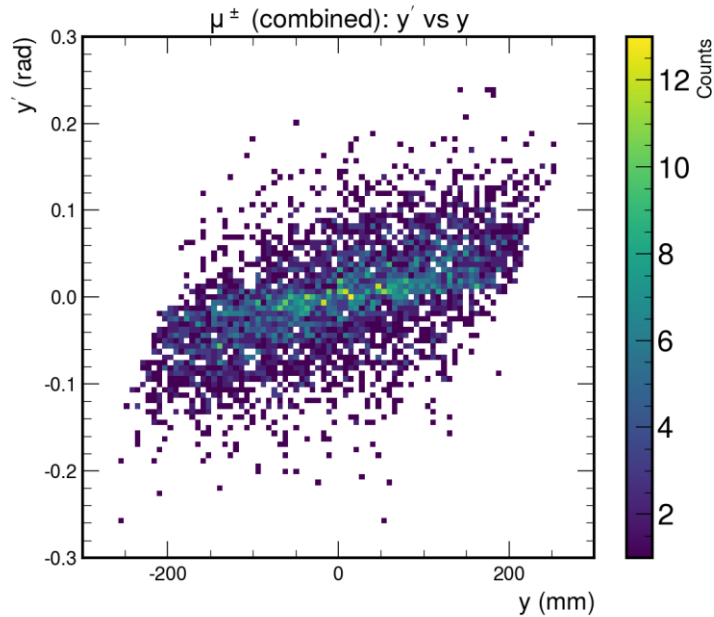
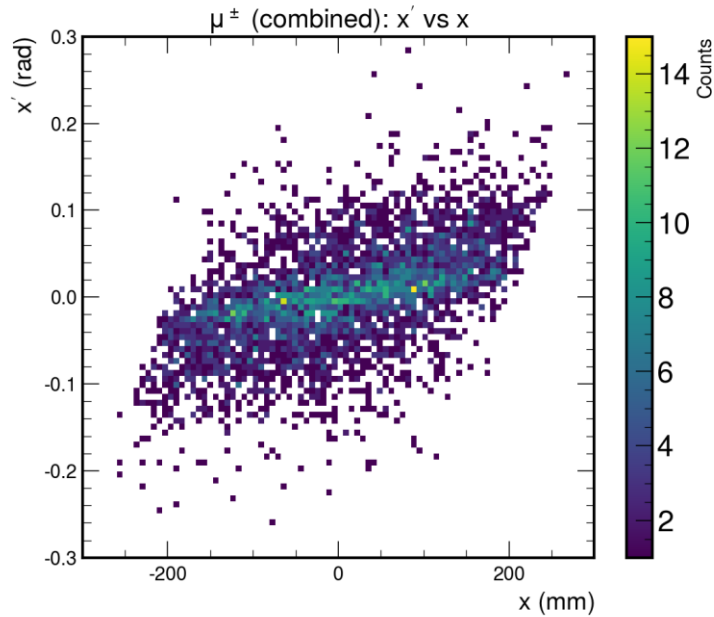
End of the Decay Channel (Top: IMCC, Bottom: Mine)



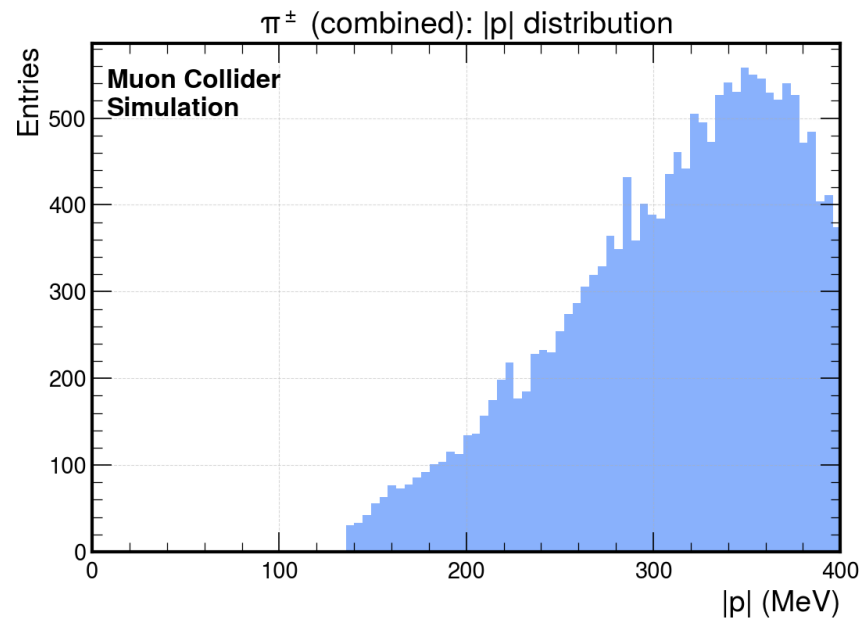
End of the PionDecayChaanel



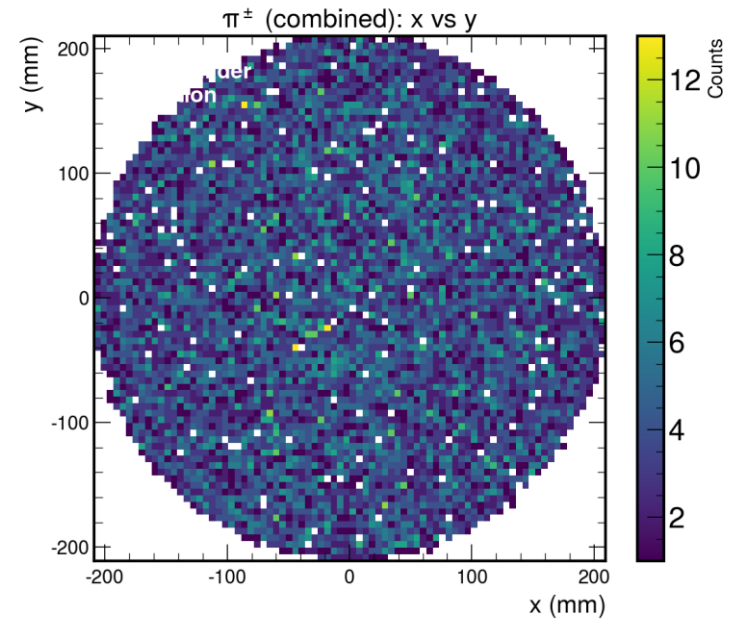
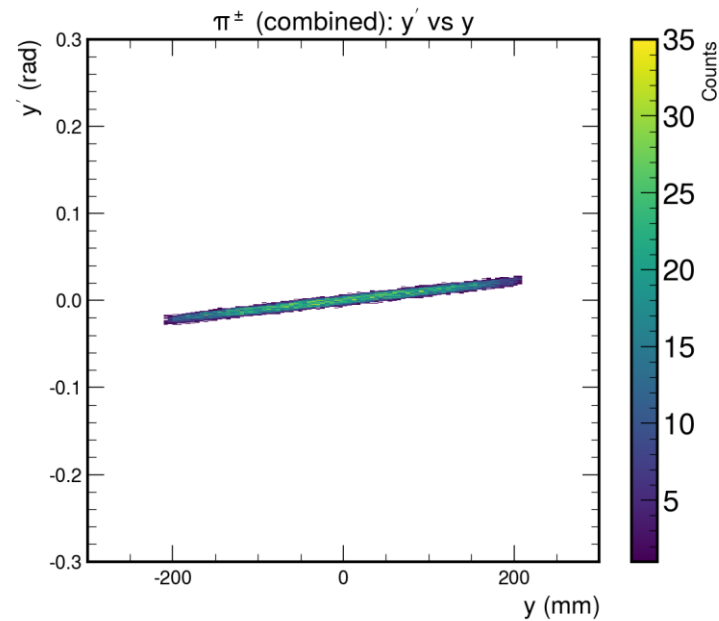
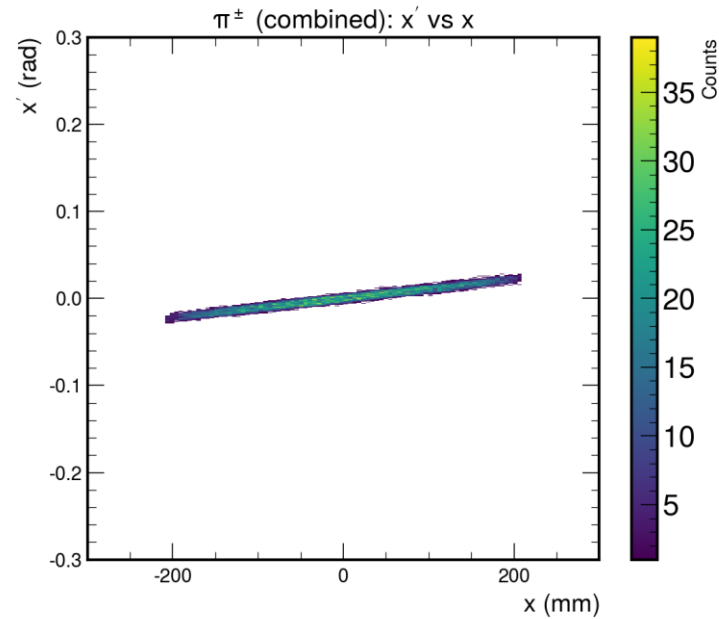
[INFO] p (PDG +2212): 0 entries
[INFO] π^+ (PDG +211): 18239 entries
[INFO] π^- (PDG -211): 0 entries
[INFO] μ^+ (PDG +13): 0 entries
[INFO] μ^- (PDG -13): 4284 entries



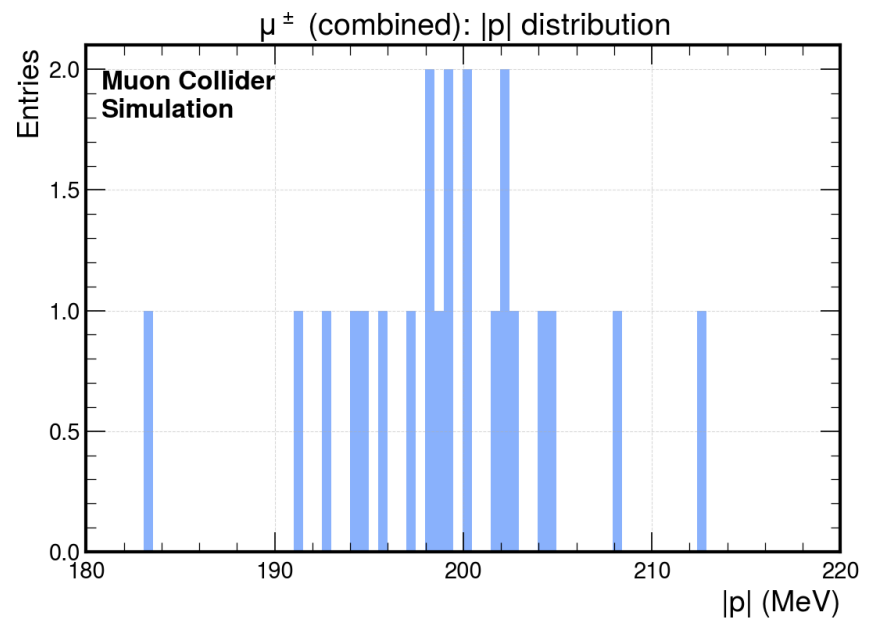
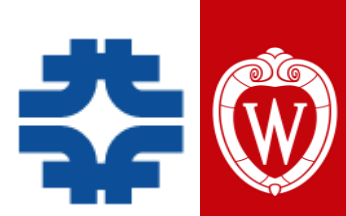
End of the PionDecayChaanel



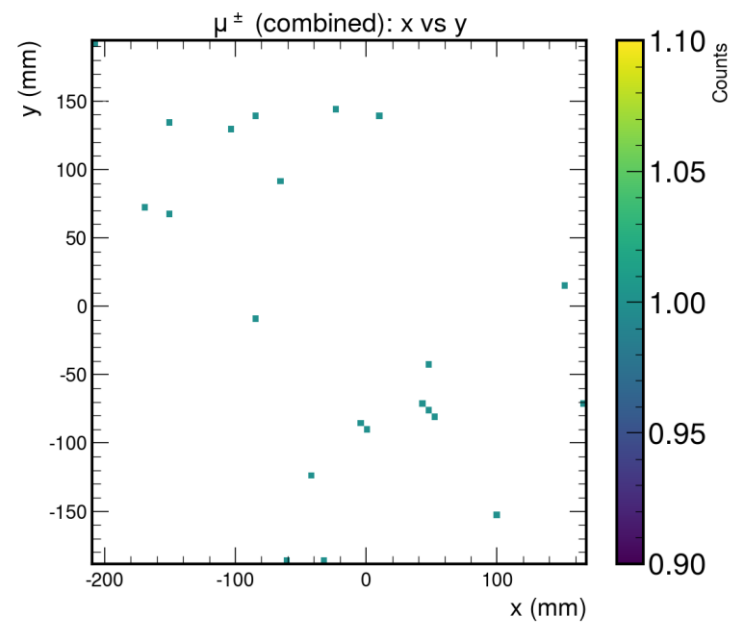
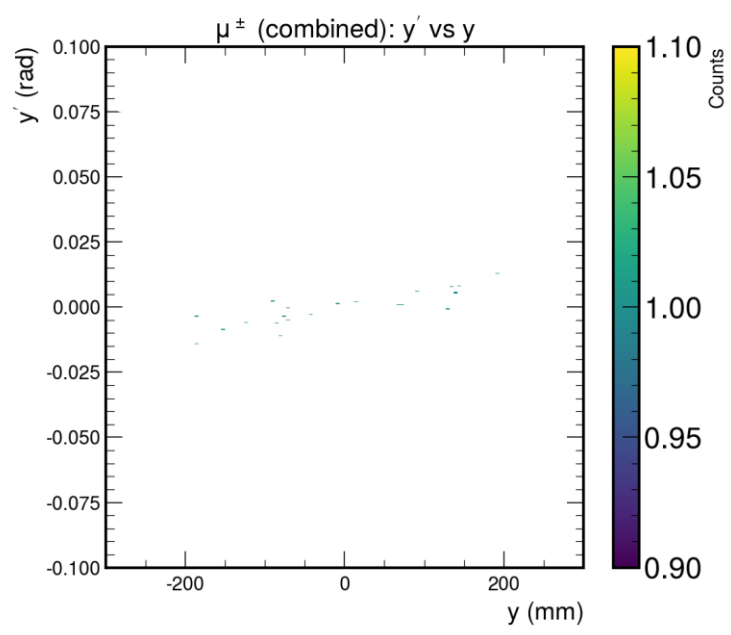
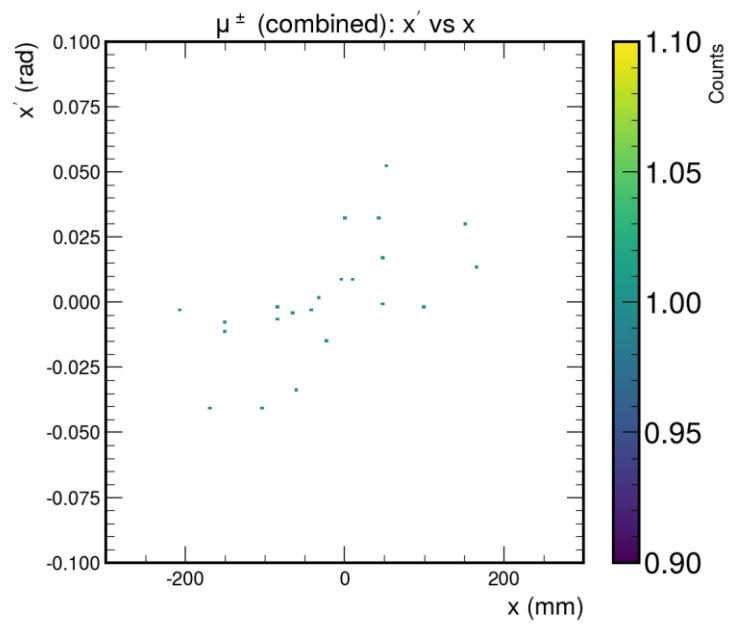
[INFO] p (PDG +2212): 0 entries
[INFO] π^+ (PDG +211): 18239 entries
[INFO] π^- (PDG -211): 0 entries
[INFO] μ^+ (PDG +13): 0 entries
[INFO] μ^- (PDG -13): 4284 entries



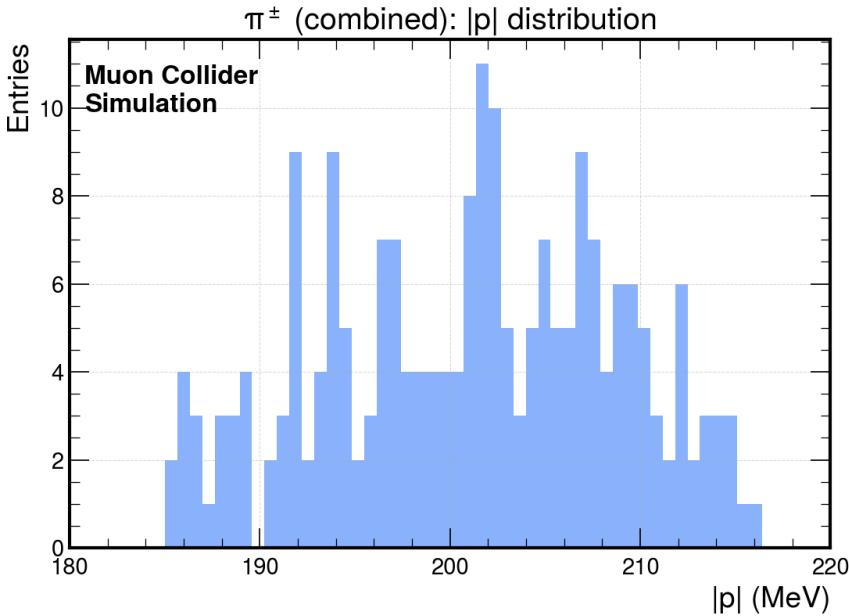
End of the Chicane



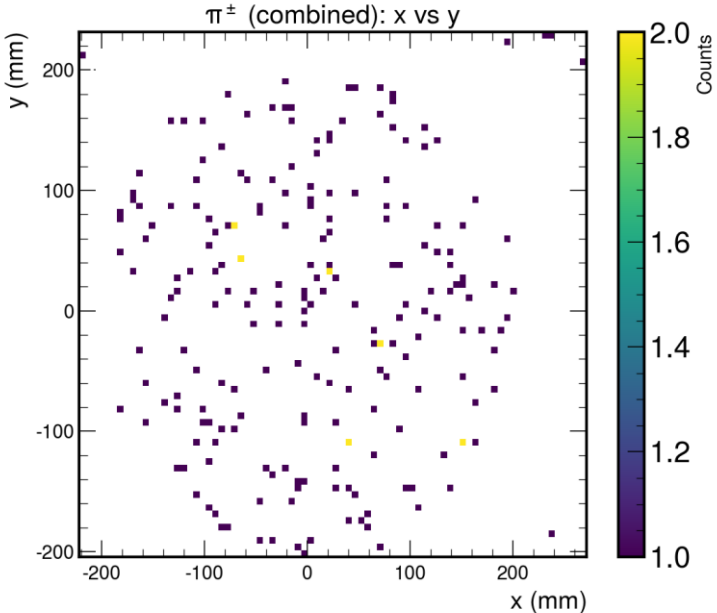
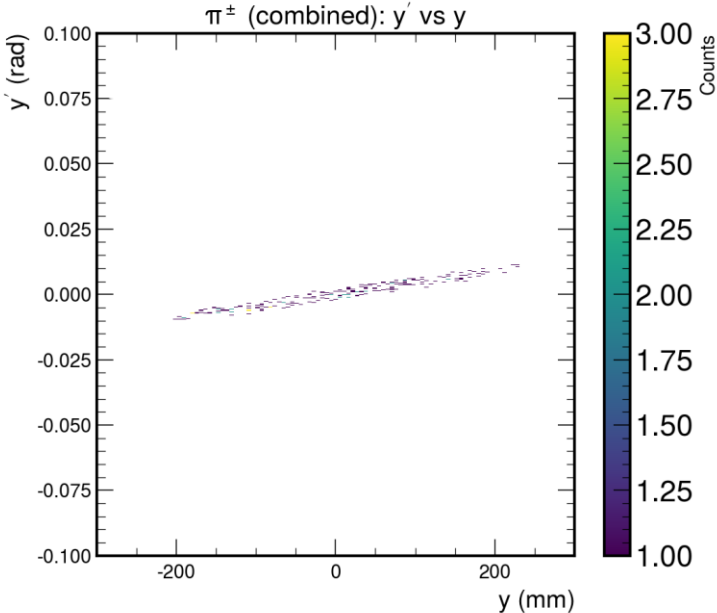
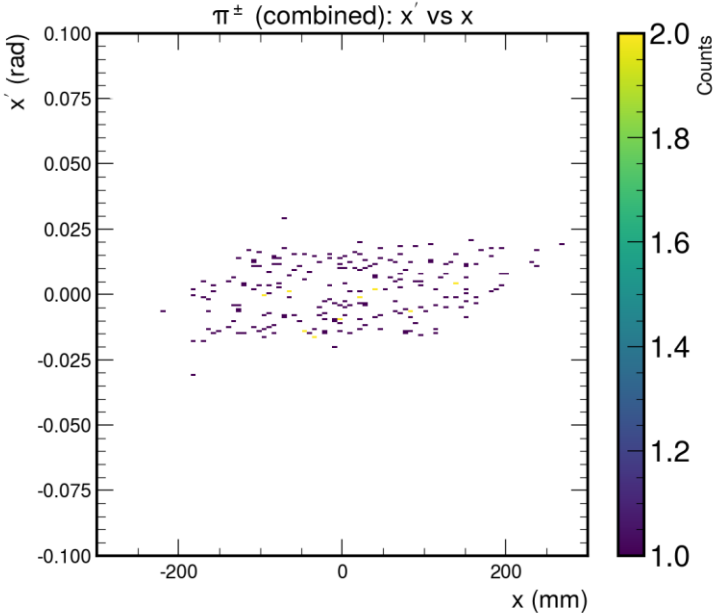
[INFO] p (PDG +2212): 0 entries
[INFO] π^+ (PDG +211): 214 entries
[INFO] π^- (PDG -211): 0 entries
[INFO] μ^+ (PDG +13): 0 entries
[INFO] μ^- (PDG -13): 22 entries

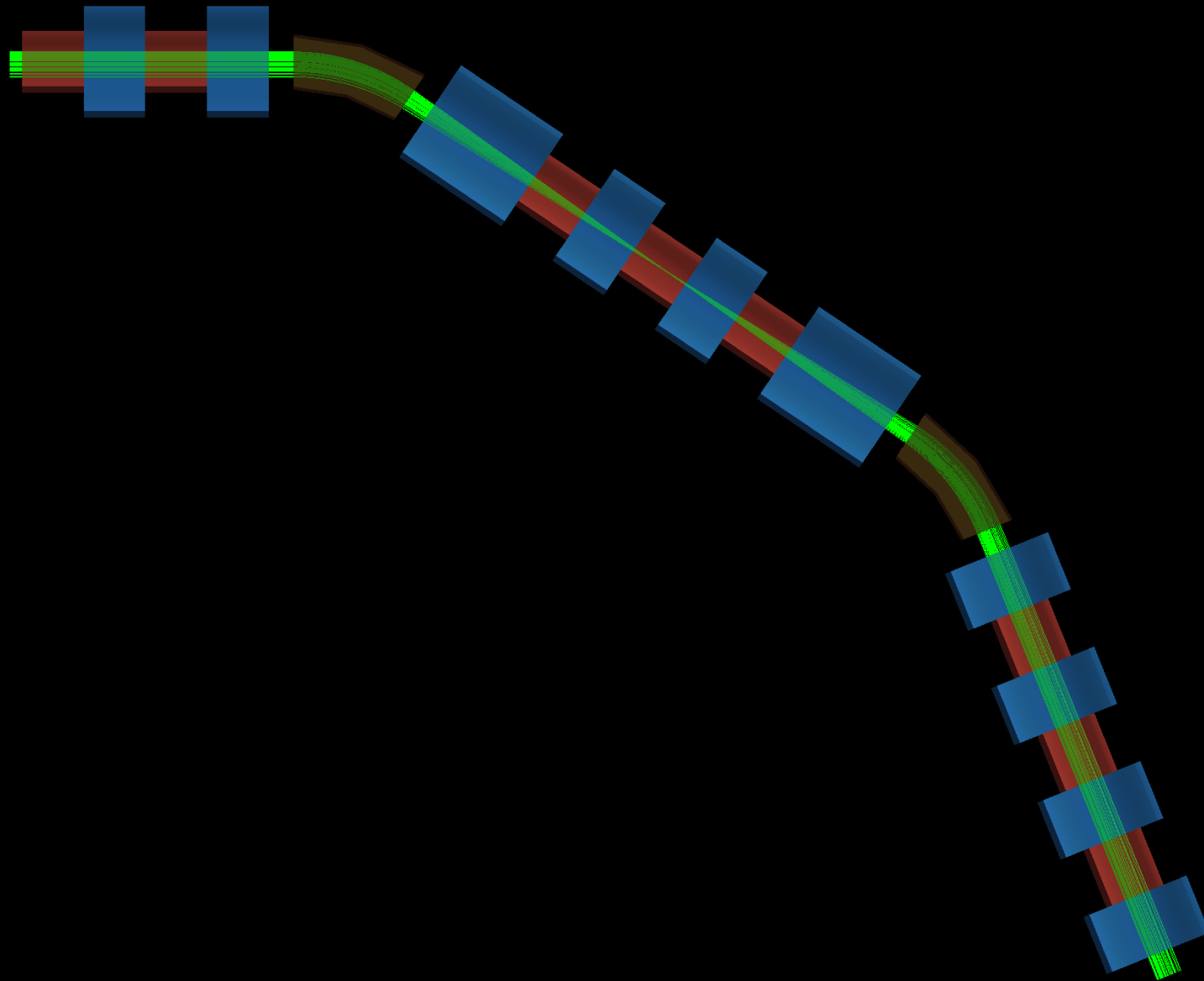


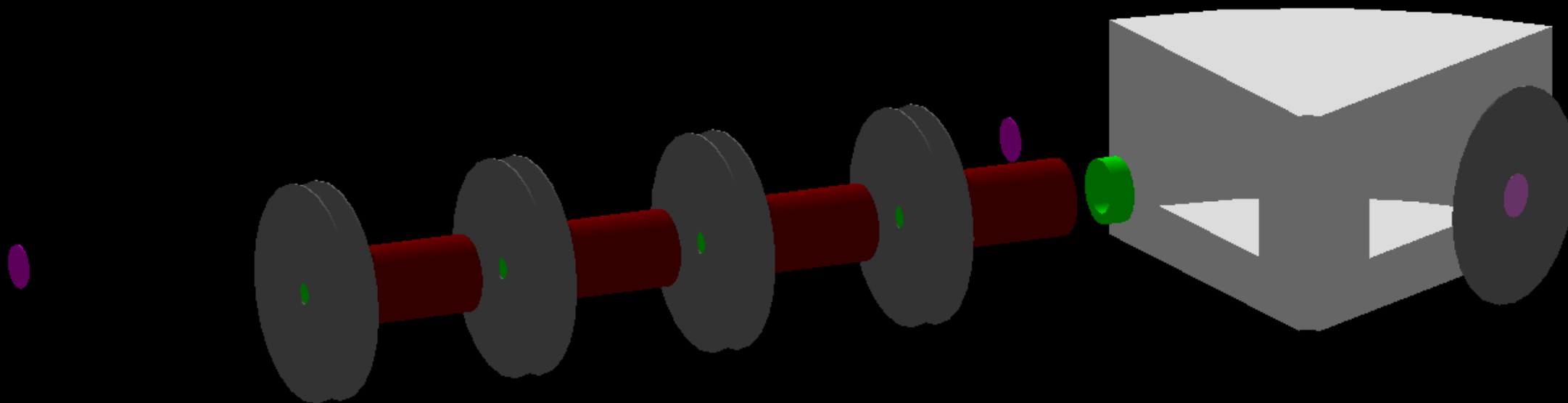
End of the Chicane



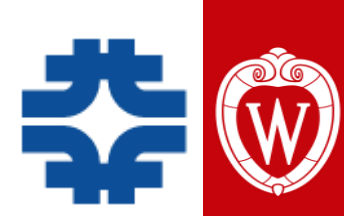
[INFO] p (PDG +2212): 0 entries
[INFO] π^+ (PDG +211): 214 entries
[INFO] π^- (PDG -211): 0 entries
[INFO] μ^+ (PDG +13): 0 entries
[INFO] μ^- (PDG -13): 22 entries







- RF pillbox
- Solenoid
- Collimator
- Dipole



- **collimator (tube)**
 - innerRadius=50
 - outerRadius=500
 - length=10
 - kill=1
- **collimator2 (tube)**
 - innerRadius=50
 - outerRadius=500
 - length=10
 - kill=1
- **solenoid sol1**
 - innerRadius=100
 - outerRadius=150
 - length=100
 - nSheets=10
 - current=21.19
 - kill=1
- **RF (pillbox cavity) pillbox**
 - innerLength=124
 - frequency=0.650
 - maxGradient=15
- **Dipole**
 - angle = -60°
 - Field region:
 - fieldCenterRadius=1000
 - fieldInnerRadius=500
 - fieldOuterRadius=1500
 - fieldHeight=500
 - Iron yoke:
 - ironInnerRadius=100
 - ironOuterRadius=2000
 - ironHeight=1000
 - DipoleField = 0.667742
 - kill=1