

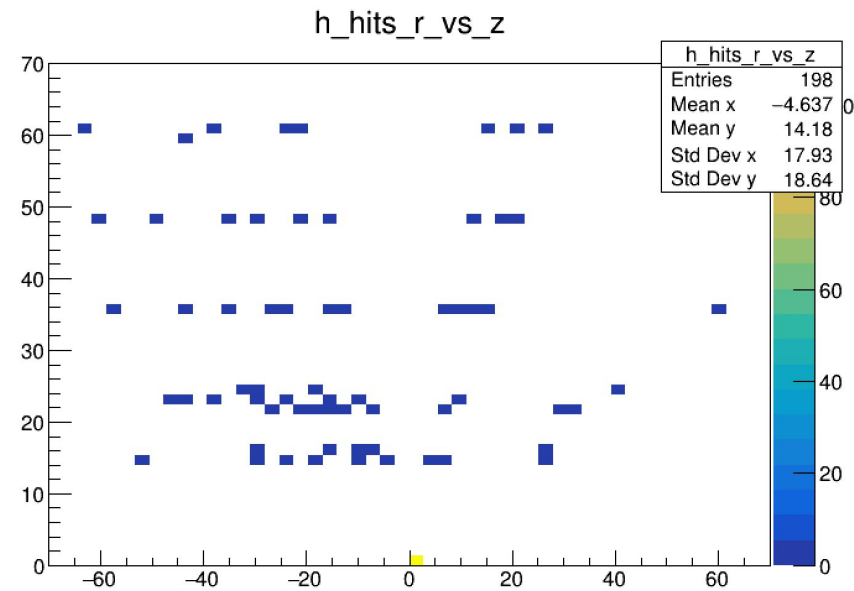
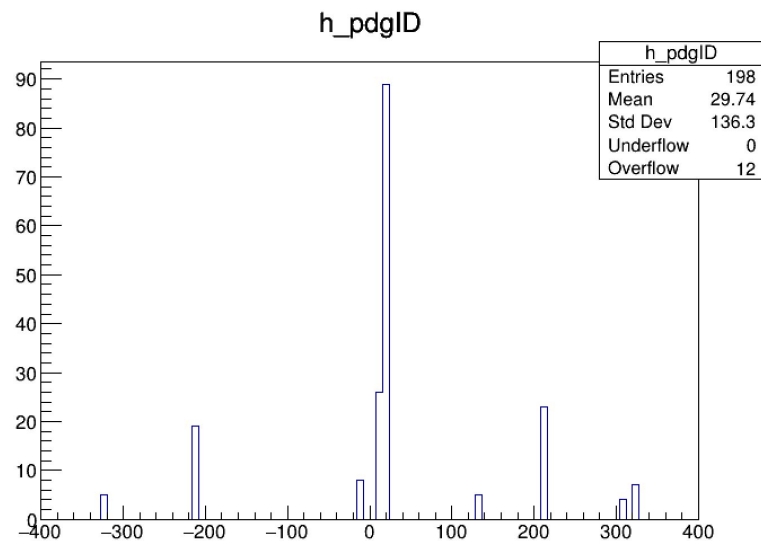
C3 Beam Background Studies

Elias Mettner - March 26, 2023

Hadron Background Production

- Last week we were having some issues with feeding the hepmc pythia output into geant
 - The geant hepmc reader will only take in hepmc2 files
- Bryan and I worked on a few solutions and met with Lindsey to on Thursday
 - Option 1: Convert HepMC3 data to HepMC2 and use current event reader
 - Option 2: Implement a new reader that can take in HepMC3
- I managed to get Option 1 working, however Lindsey wants to pursue Option 2 to hopefully circumvent more issues down the road
 - We are still going to take some time to look at this data and the hepmc output a little more while we work through it

Converted HepMC3 Data fed Through Geant



- Low number of events
- Will be good to compare once we successfully implement the new reader