



Forward Tracking System Occupancy Studies

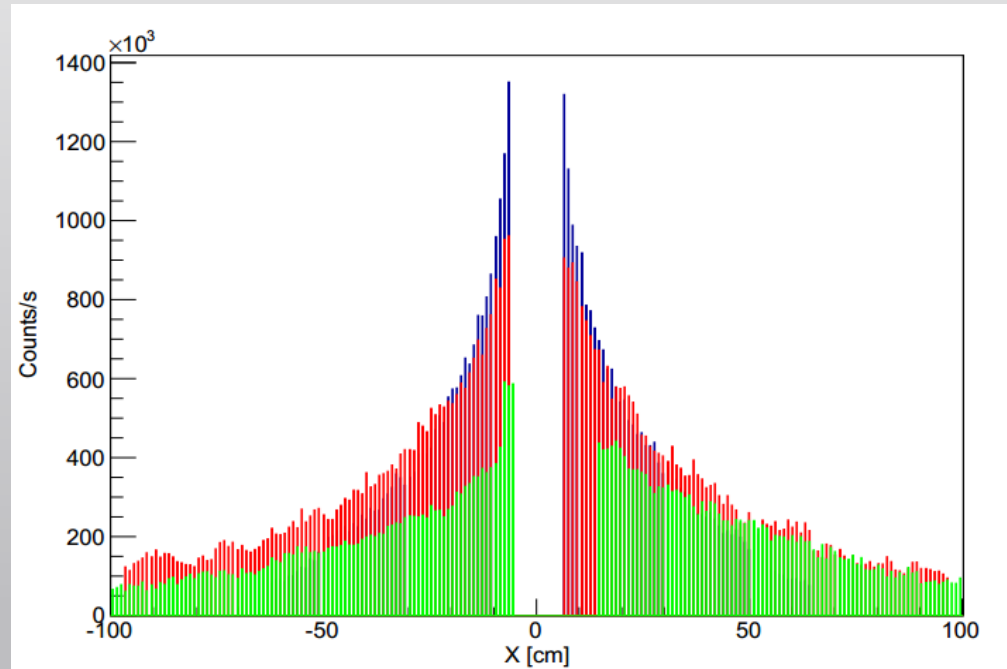
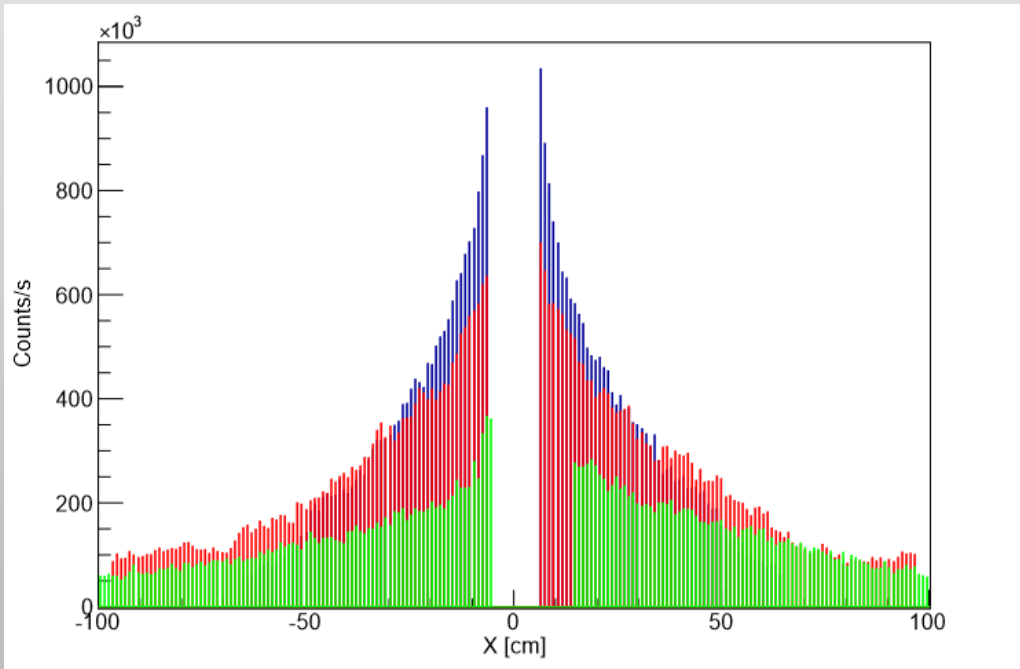
Jacek Biertnat Jagiellonian Uni



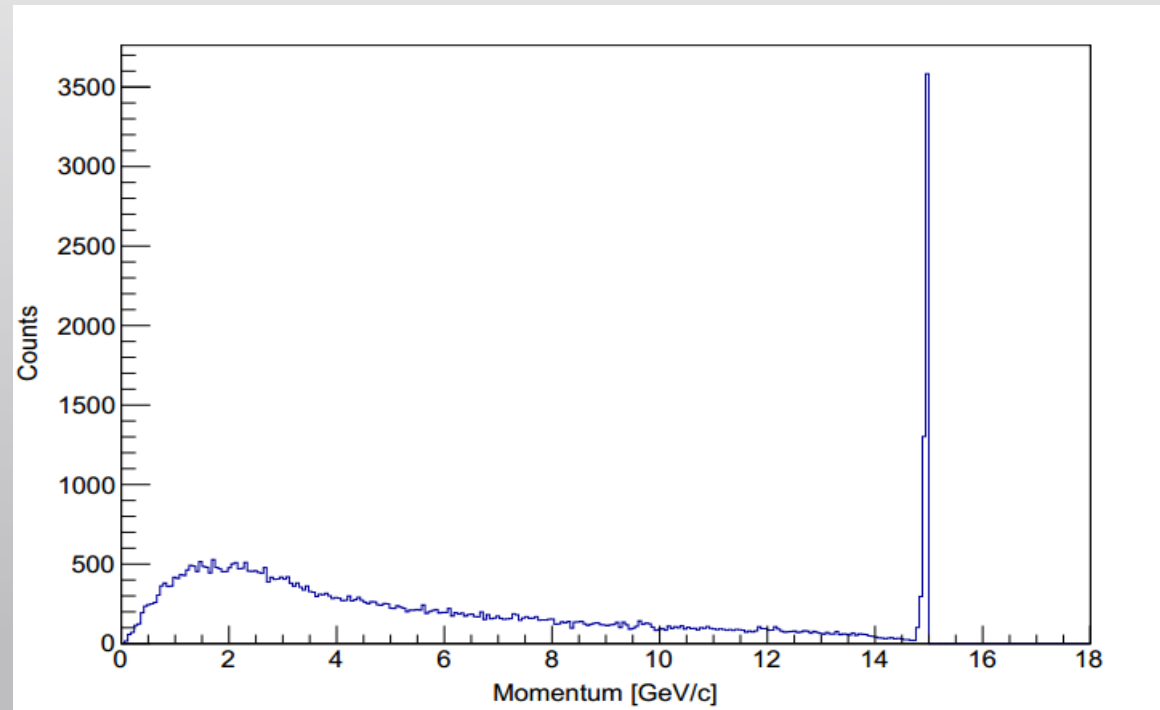
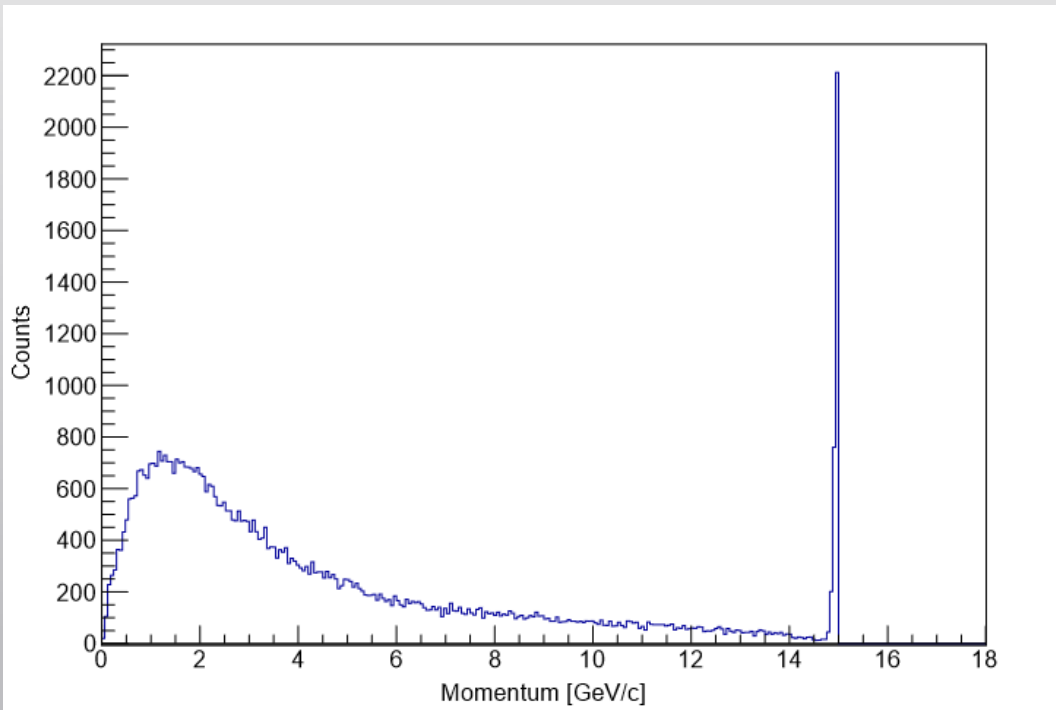
Menu:

- Beam momentum : 15 GeV/c
- Proton & Nitrogen target
- Interaction rate: 10^7 /s for Nitrogen & 2×10^7 /s for proton
- New beam pipe design
- Done for FT1,FT3,FT5

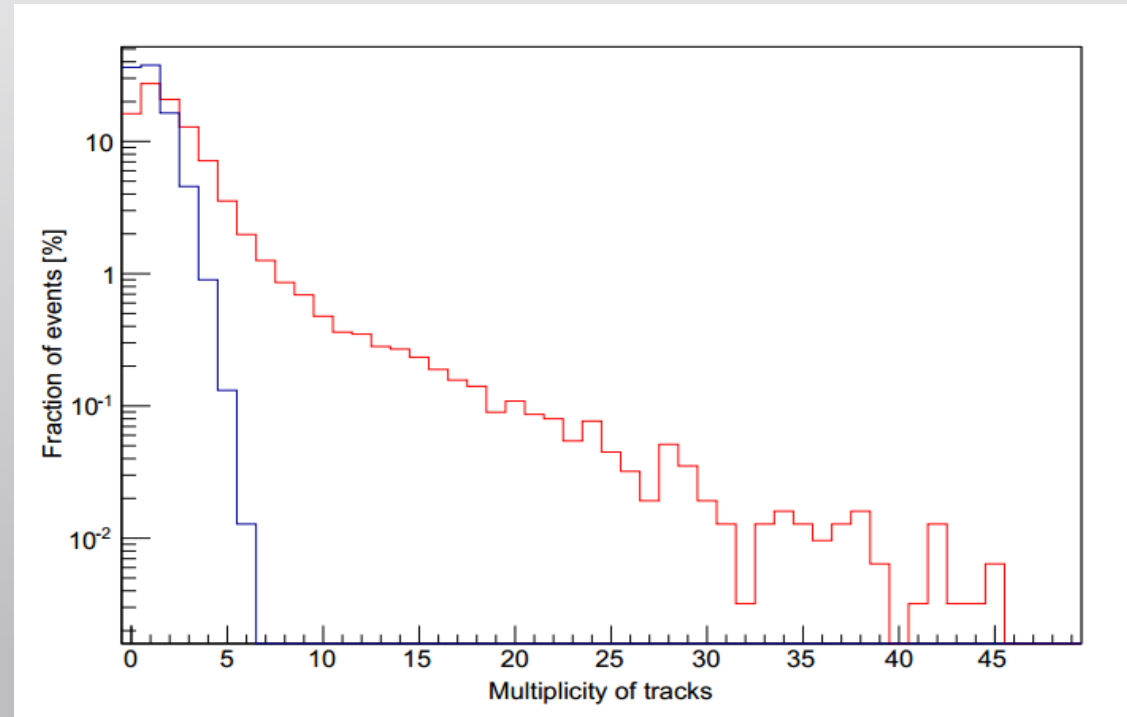
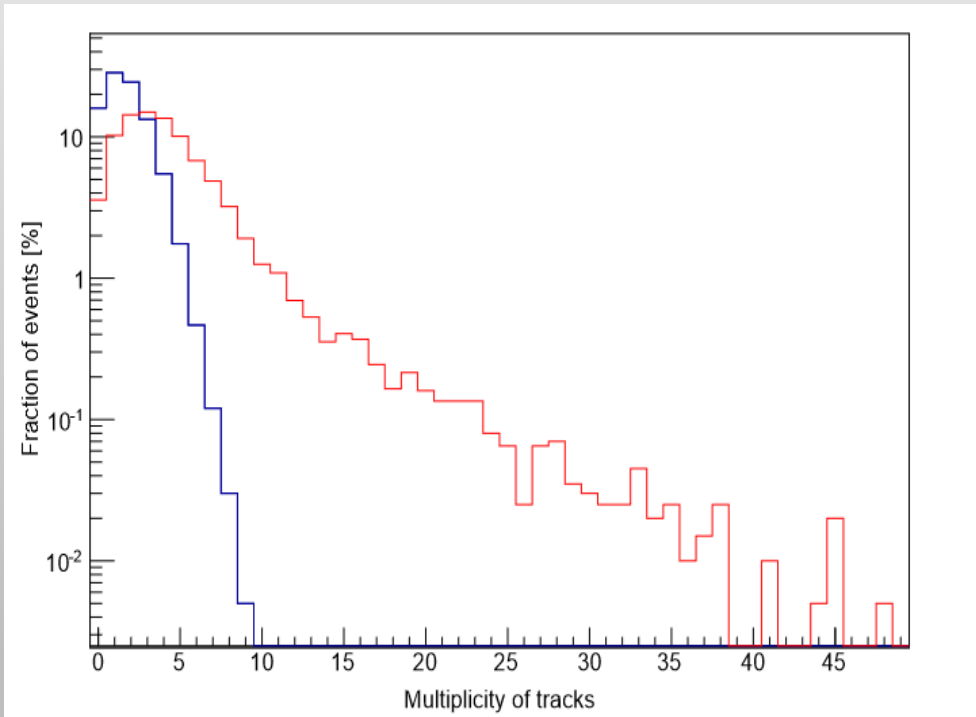
Counts/s for different FT`s (pbar-N left , pabr-p right)



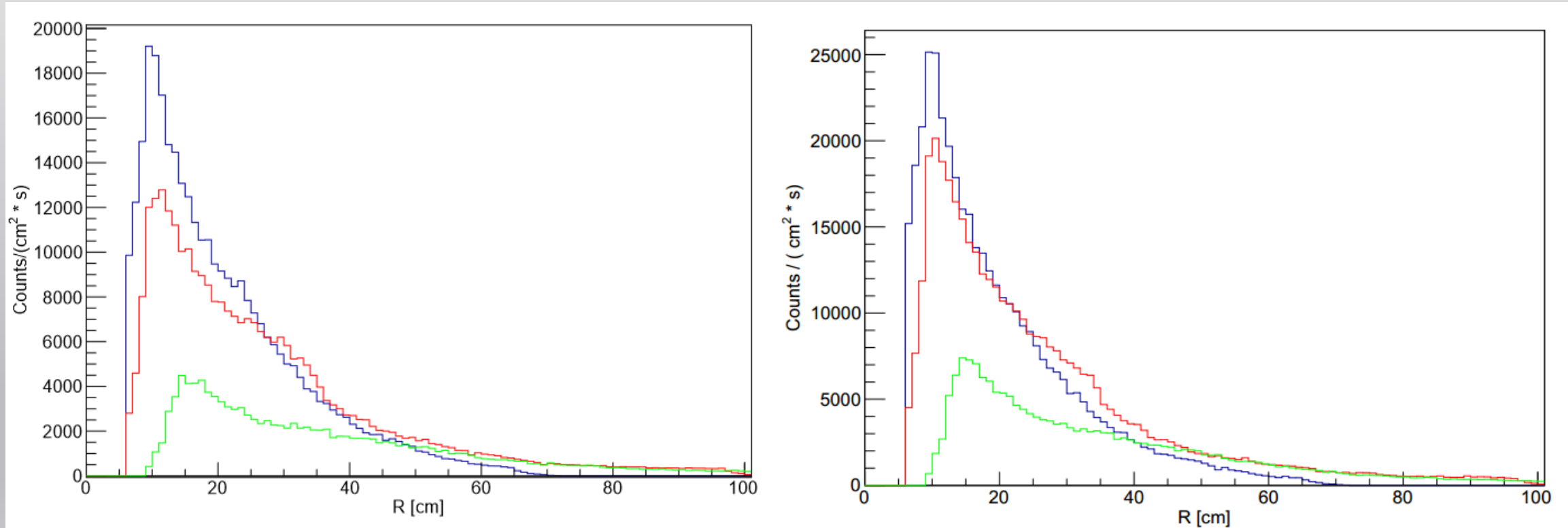
Momentum spectrum of ejectiles



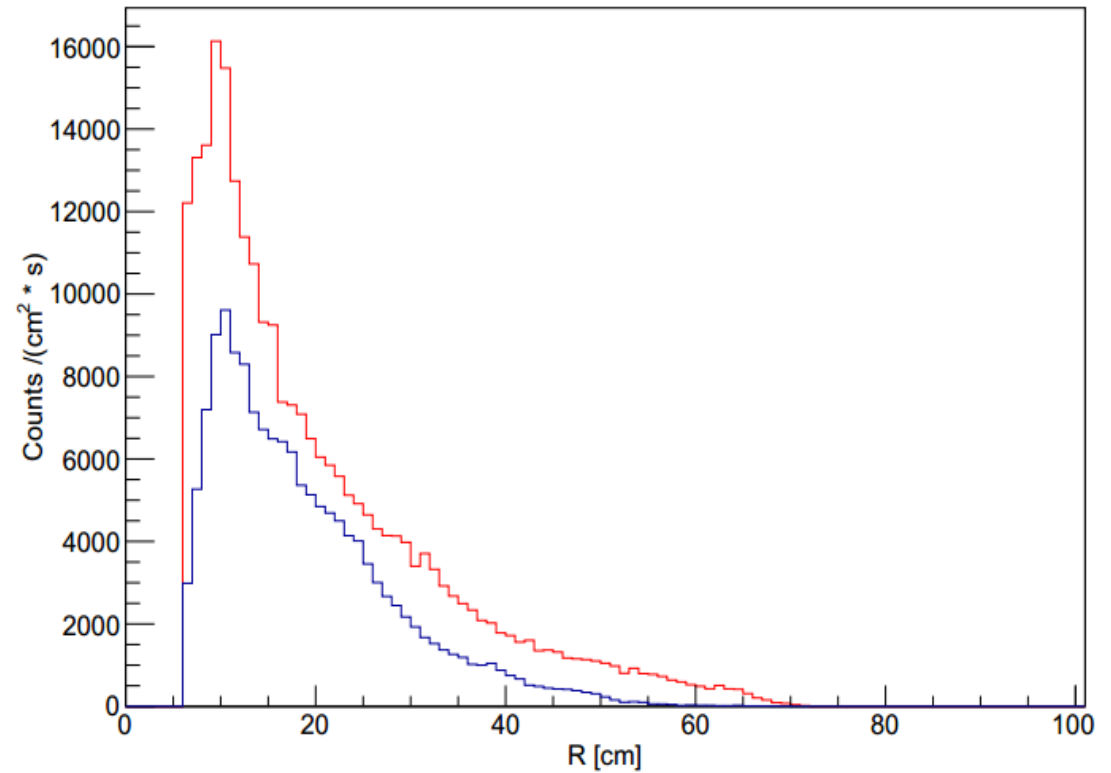
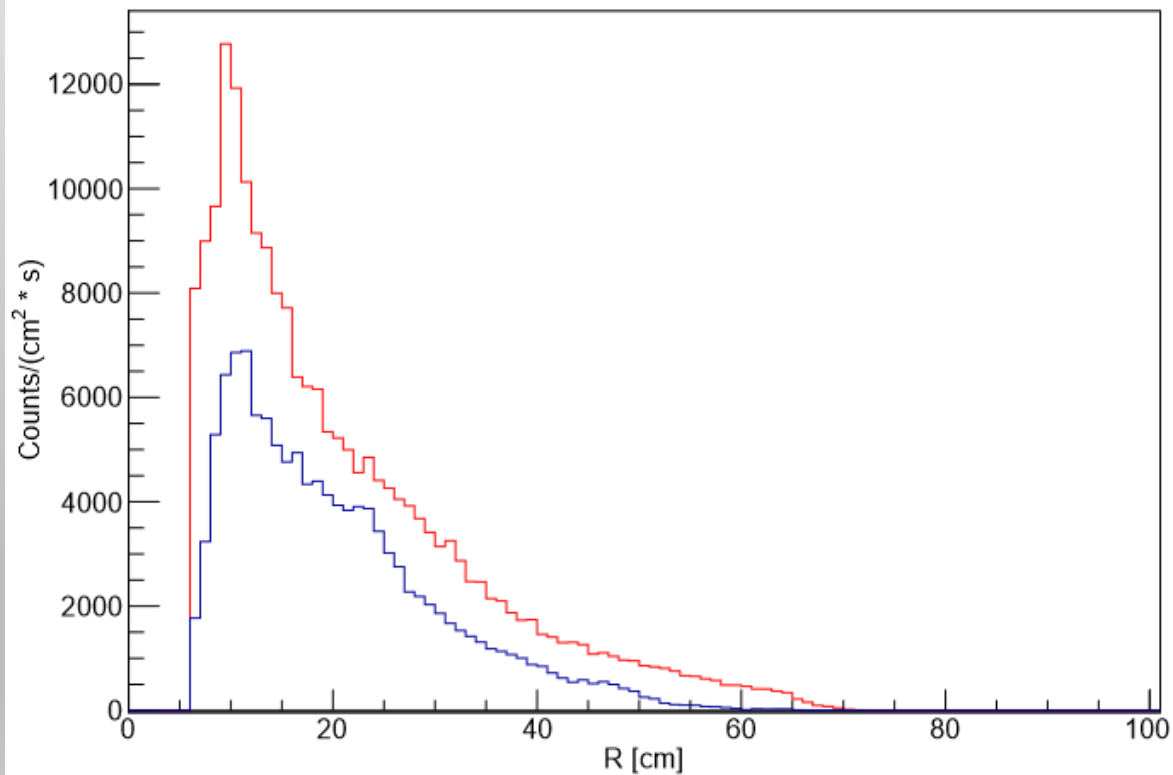
MC Track Multiplicity primary/secondary in FT1



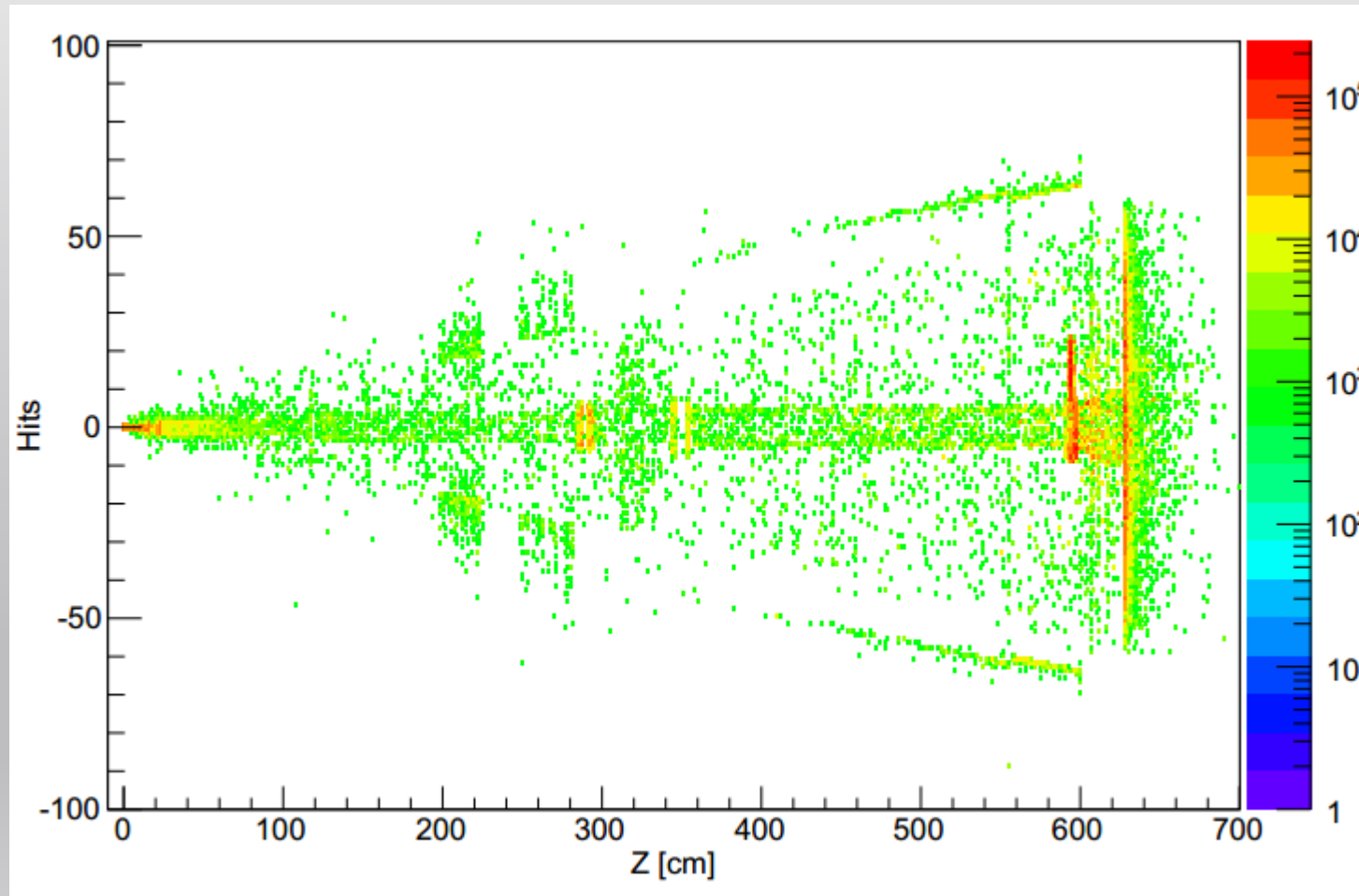
Counts / (s * cm²) also done for primary
& secondary particles
(FT1-blue, FT3- red, FT5- green)



Primary particles (blue), Secondary Particle (red)



Scan from the side of the detector (pbar-p)



- Low momentum particles expected in the FT`s
- A lot of background coming form the beam pipe (still)
- Some scattering still present on the beam pipe elements

Thank You!

