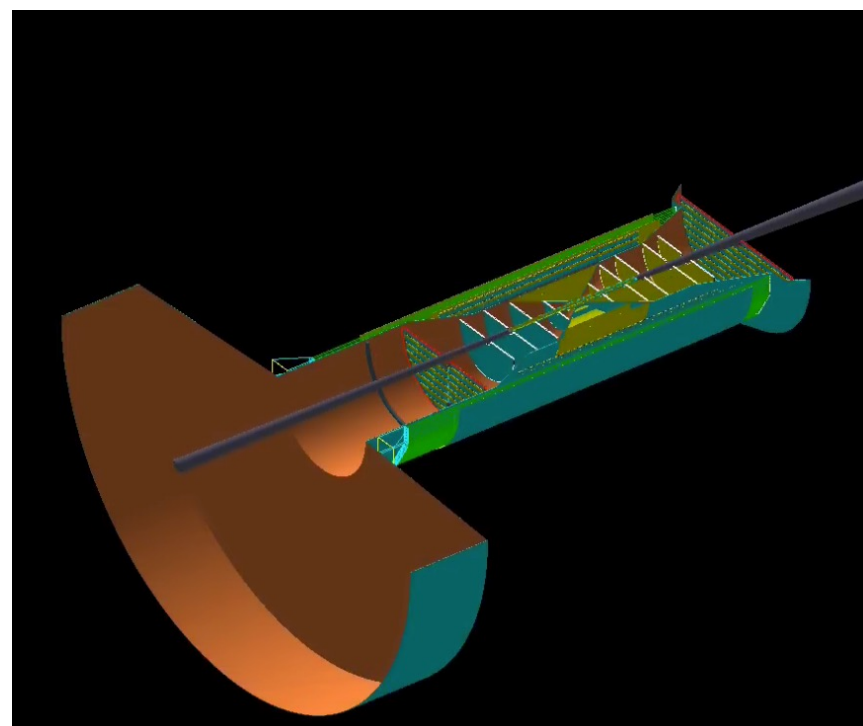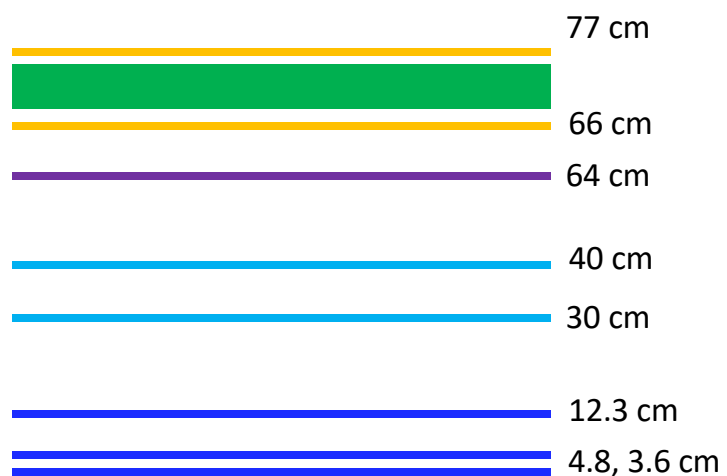# Detector Configuration
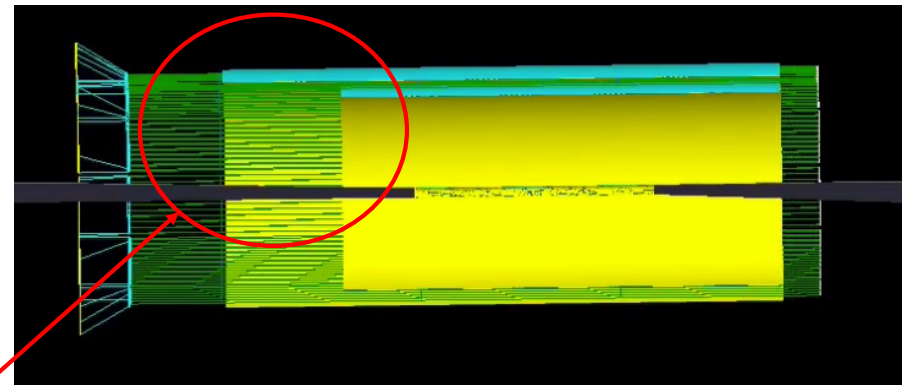
➢ Detector Configuration
- o Silicon vertex
- o Silicon sagitta
- o AC-LGAD
- o MPGD
- o DIRC

77 cm

66 cm

64 cm

40 cm

30 cm

12.3 cm

4.8, 3.6 cm

# Detector Configuration: Issues

o Making inner MPGD layer same length as outer leads to overlap with services

- Inner layer made shorter: -125 cm < z < 145 cm

- Outer layer (from ECCE): -197 cm < z < 145 cm
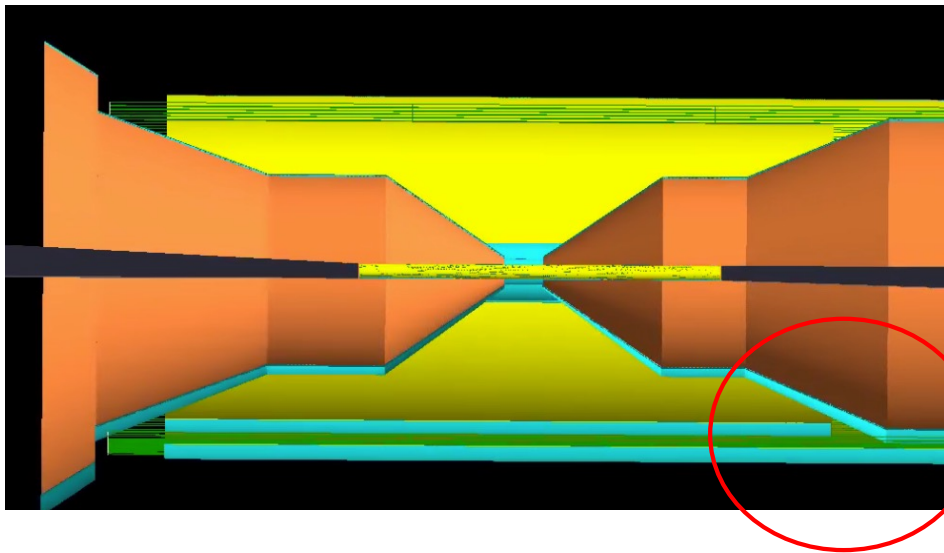
Angular Resolution at DIRC

- Project the reconstructed track to
  - Entrance (r = 66 cm)
  - Exit (r = 77 cm)
- Compare projected reconstructed track to true hit
- MPGDs: $\sigma_{r\phi} = \sigma_z = 55\ \mu m$, 1% X0
- No MPGDs: $\sigma_{r\phi} = \sigma_z = 999\ cm$, 0.001% X0
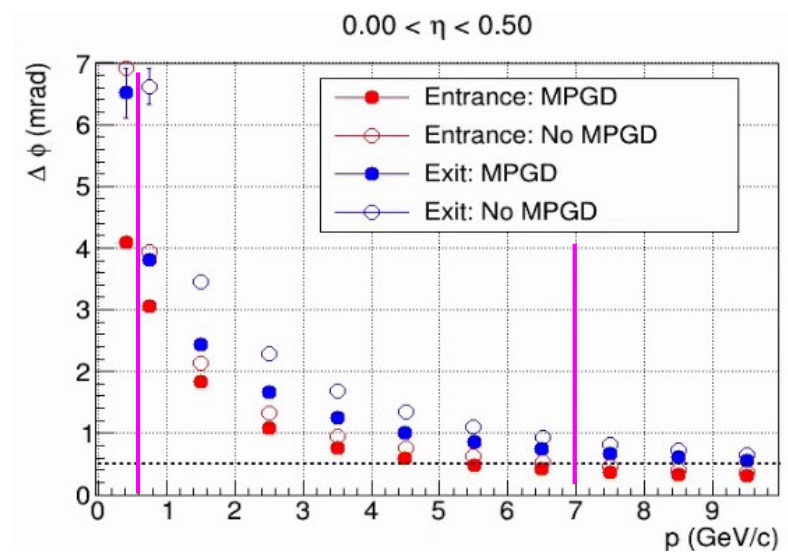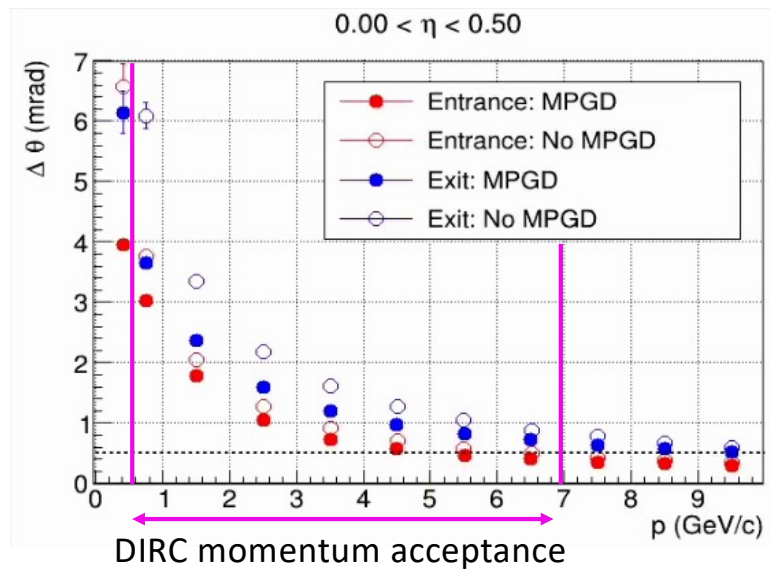
Angular Resolution at DIRC

o Improvement by having MPGDs implemented

DIRC momentum acceptance