

□ Geometry

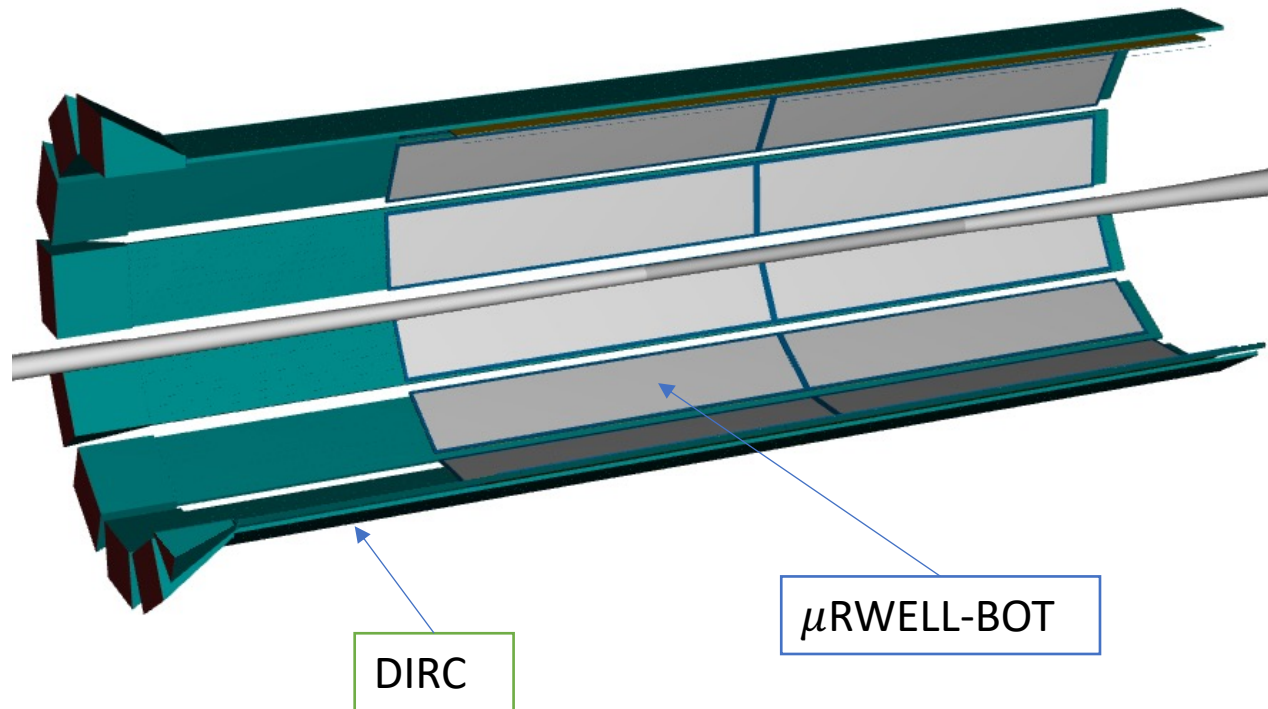
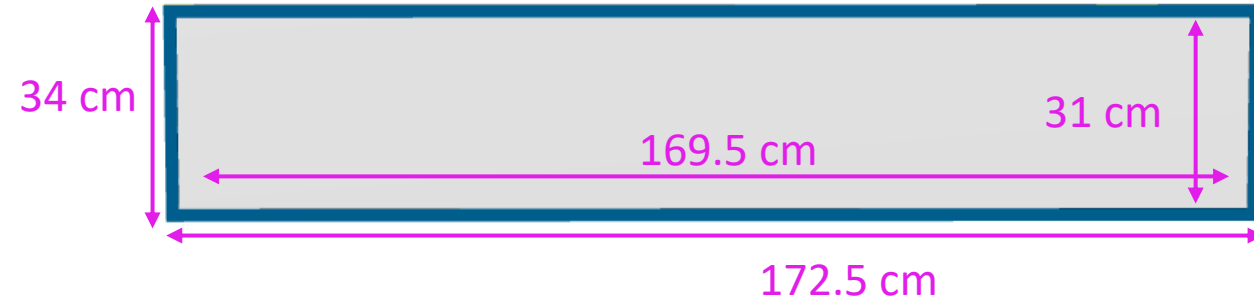
- CyMBaL – Niv/Matt (temp) / additional volunteer needed
- μ RWELL-BOT – Matt (temp)/ additional volunteer needed
- μ RWELL-ECT -- Mariangela

□ Digitization

- Incorporate test beam data to smear charge to get appropriate space point resolution -- Babu

□ Strip Readout

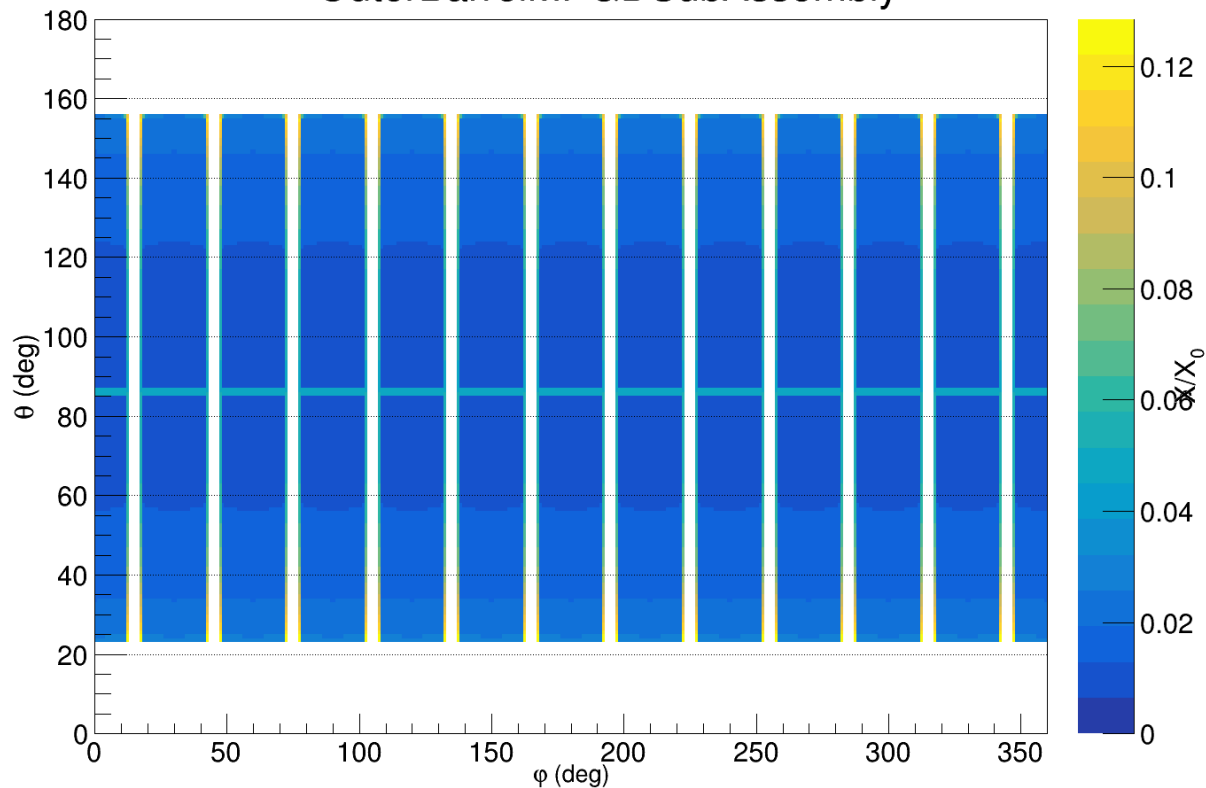
- Implement strip segmentation on MPGD detectors
- Digitize the 1D hits to produce two 1D measurements → should be able to use digitization implementation currently being worked on
- Form 2D measurement from the two 1D measurements → Needed for track fitting/reco



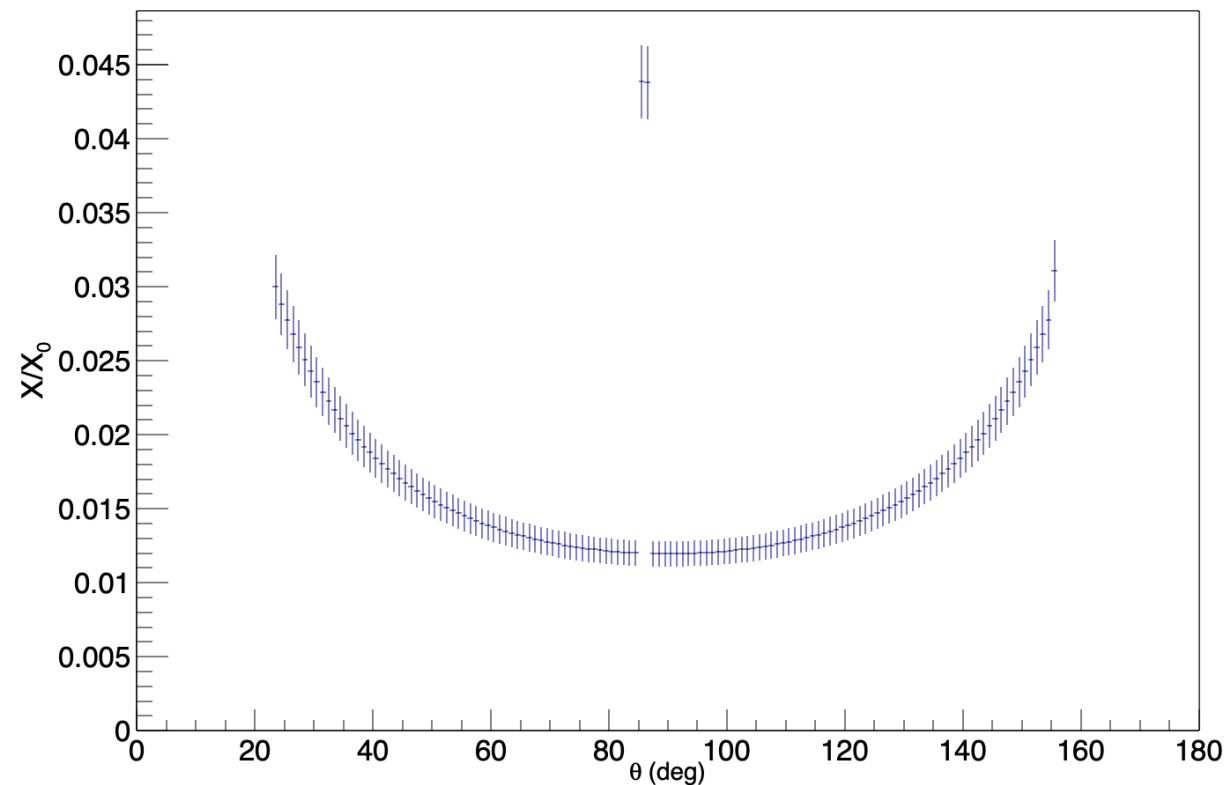
- Planar layers based on μ RWELL technology
- Two panels needed for full length
- Panels arranged around azimuth
- Frame width = 15 mm, thickness = 7 mm
- Barrel:
 - $L = 339 \text{ cm}$ ($-164.5 \text{ cm} \leq Z \leq 174.5 \text{ cm}$)
 - $R = 72.5 \text{ cm}$

Is this material budget still reasonable at this stage?

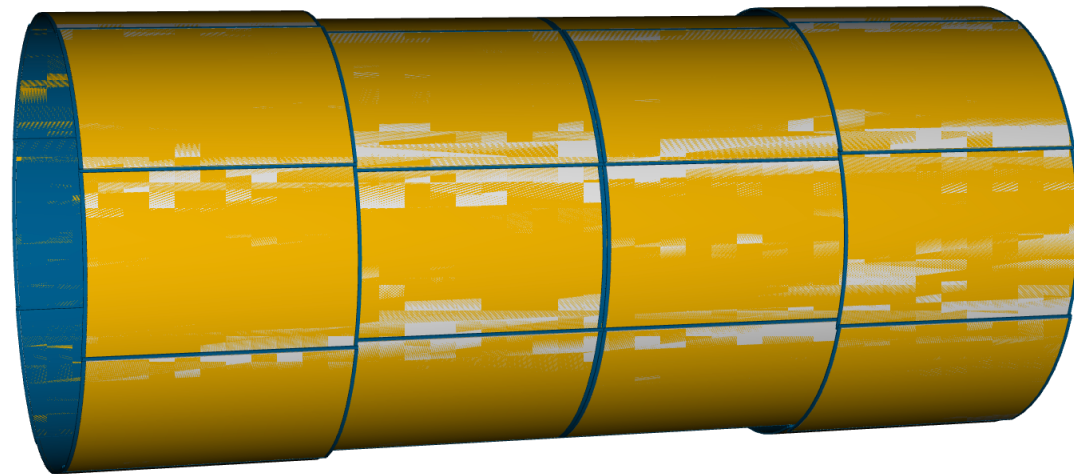
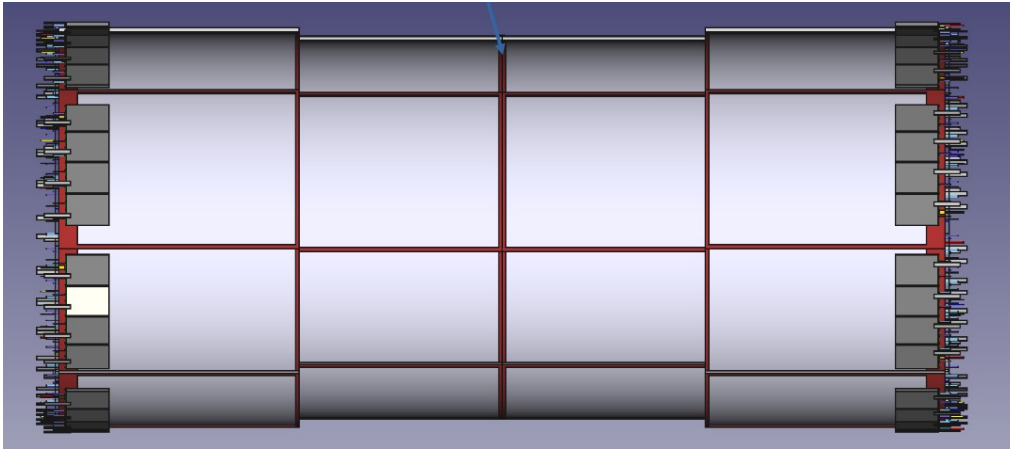
OuterBarrelMPGDSubAssembly



OuterBarrelMPGDSubAssembly



Details: CyMBaL Design



- ❑ Initial implementation started by Niv
- ❑ Debugged code and now passes initial DD4hep and ACTS geometry checks using macros
 - `checkOverlaps` (for DD4hep geo.)
 - `scripts/test_ACTS.cxx` (for ACTS geo)
- ❑ Investigating segfault triggered by EICrecon during reconstruction