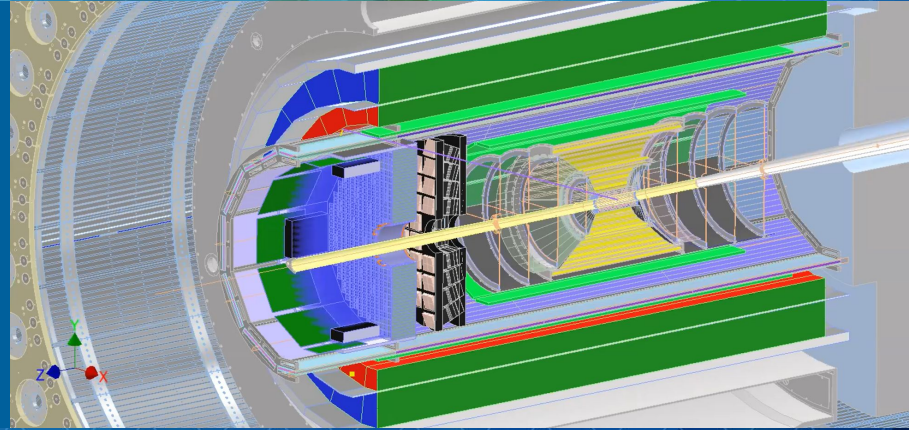


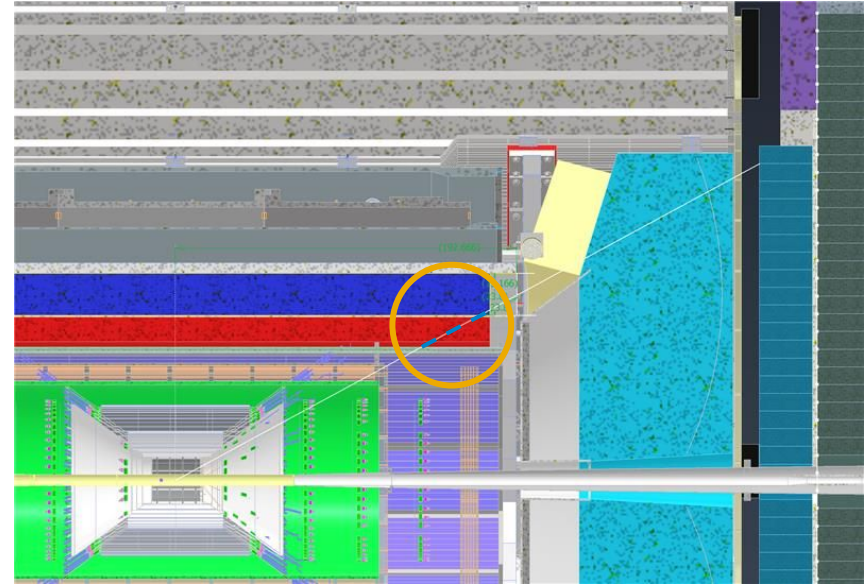
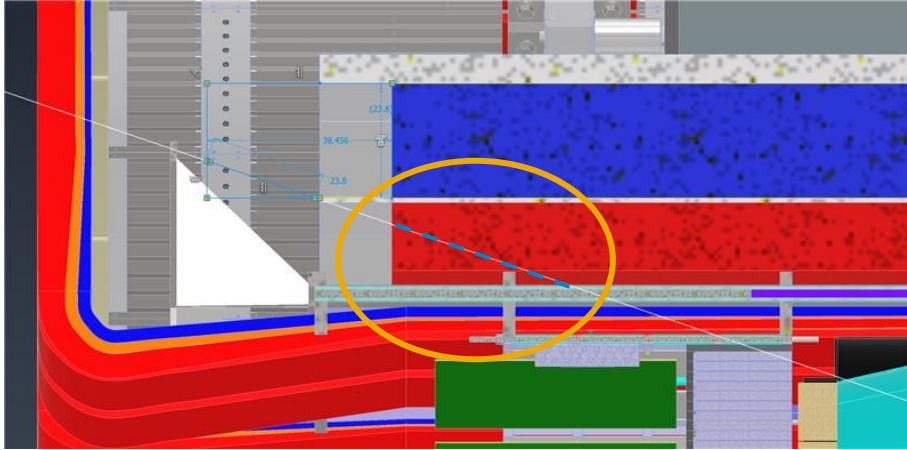
Simulation Updates

Barrel ECAL Overlaps



Maria Zurek, 05/09/2023

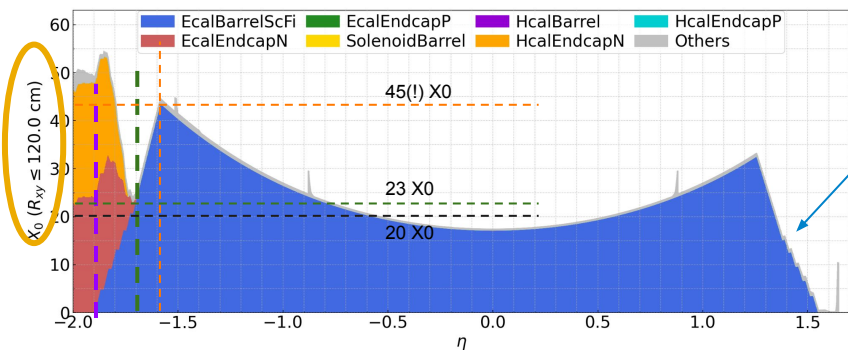
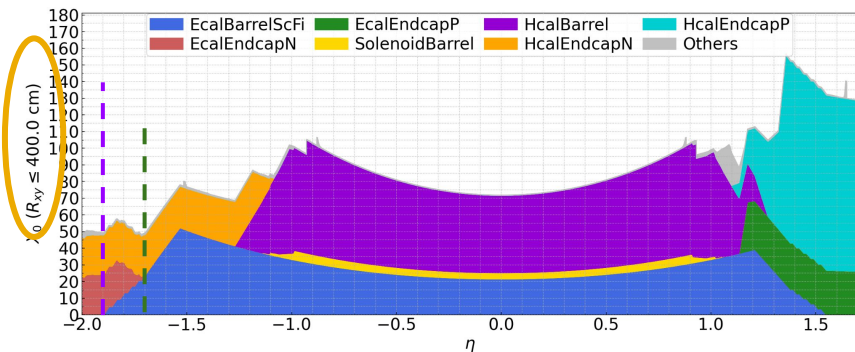
Dimensions



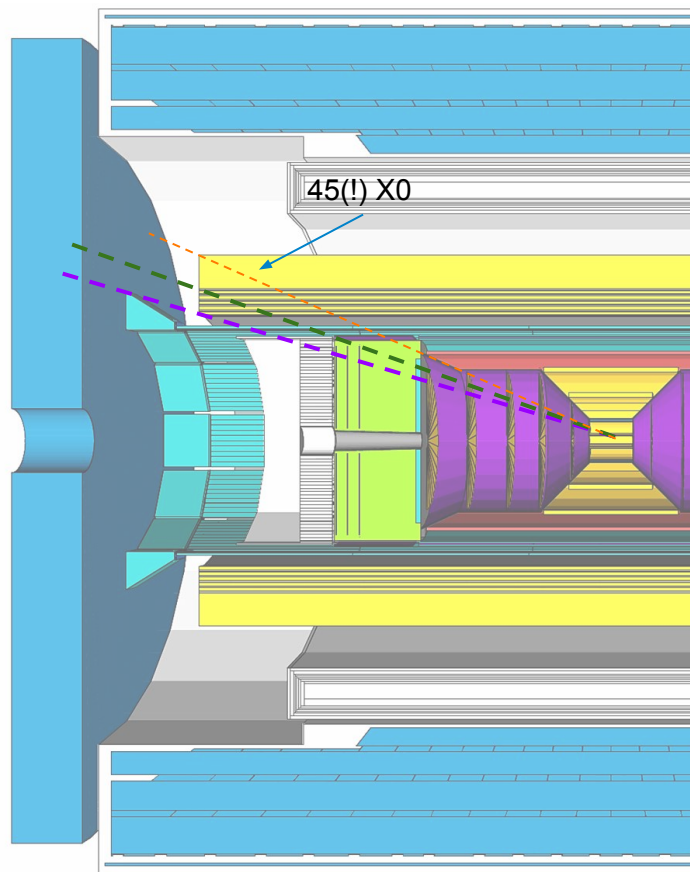
- 1) Imaging part includes Pb/ScFi (2 cm between each imaging layer)
- 2) Particles traveling at small theta angle travel through more material than at $\eta = 0$

Dimensions

Material scan through the ePIC geometry
(for 17.1 X0 of the ScFi/Pb)



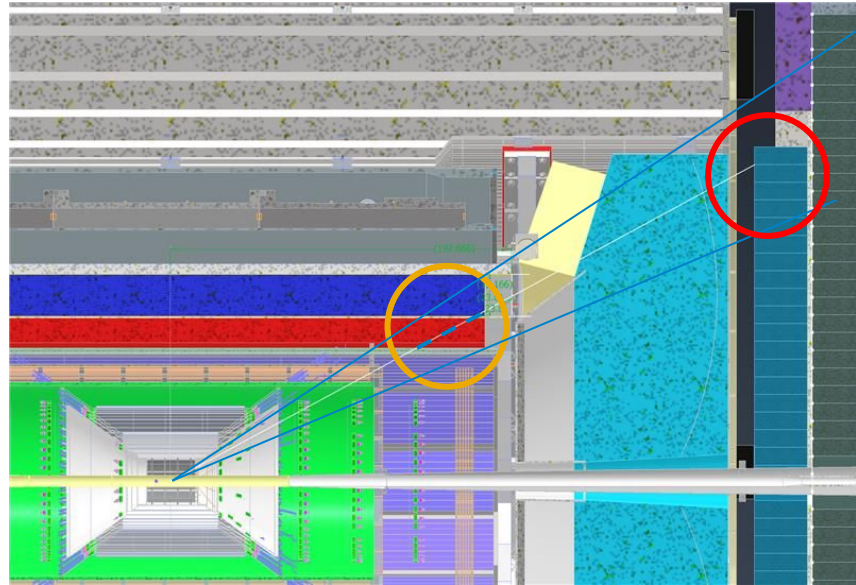
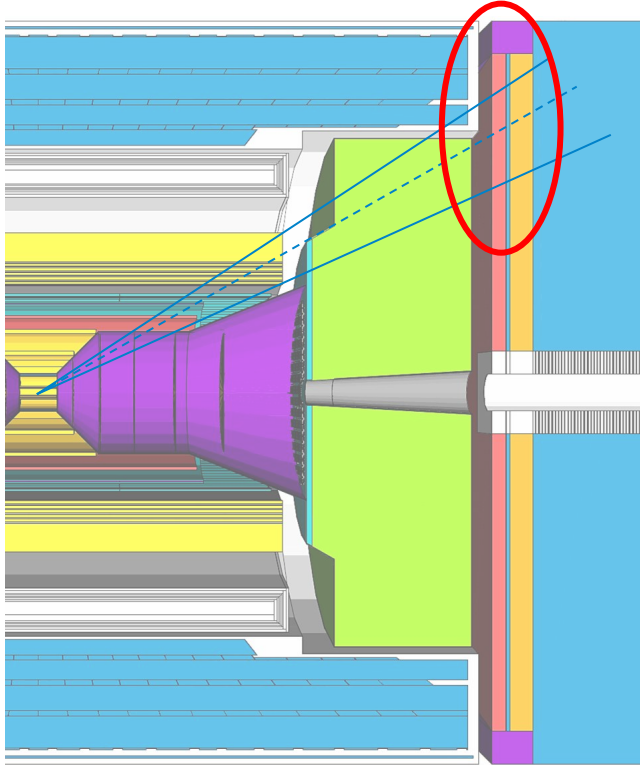
step-like
structure
from
ScFi/Pb
layers in
between
AstroPix
layers



Dimensions

These regions looks very different in simulation and CAD (dimensions of EndcapEMCAL)

- BECAL is put in simulations according to menagerie - 

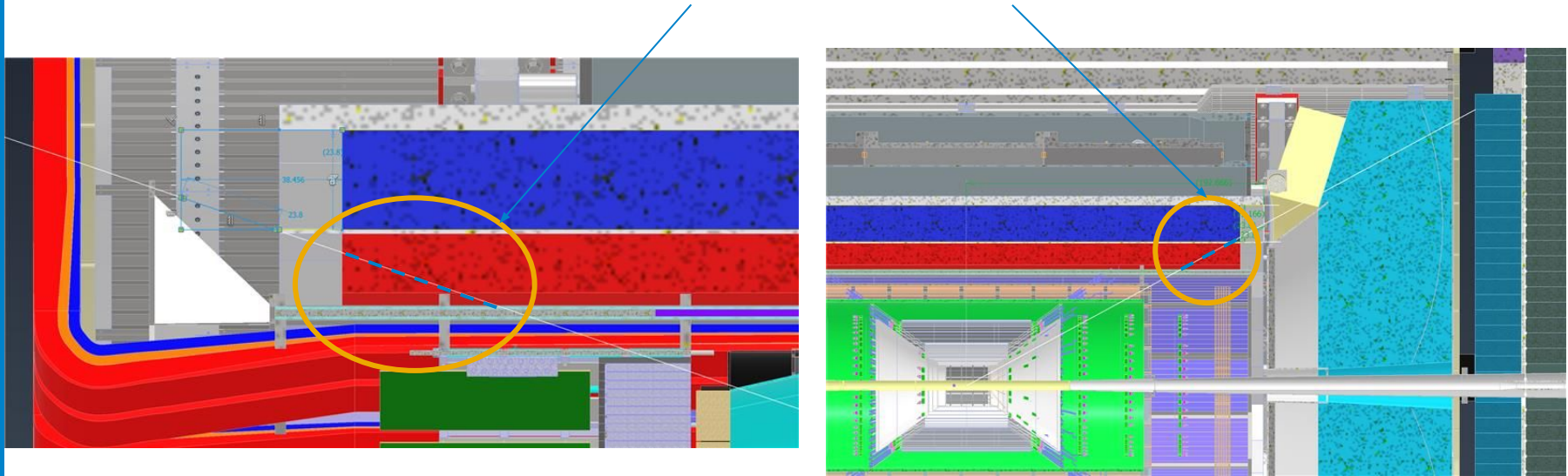


Edge Dimensions

From Menagerie Tables:

- negative ecal front face at z -174 cm, up to r = 63 cm
- positive ecal front face at z 329.5 cm, up to r = 195 cm
- backward block size = 2 cm, forward module size = 2.5 cm

$\eta = -1.77$ and $+1.31$ for those lines assuming *one block size less than maximum radius*



$\eta = -1.77$ and $+1.31$

