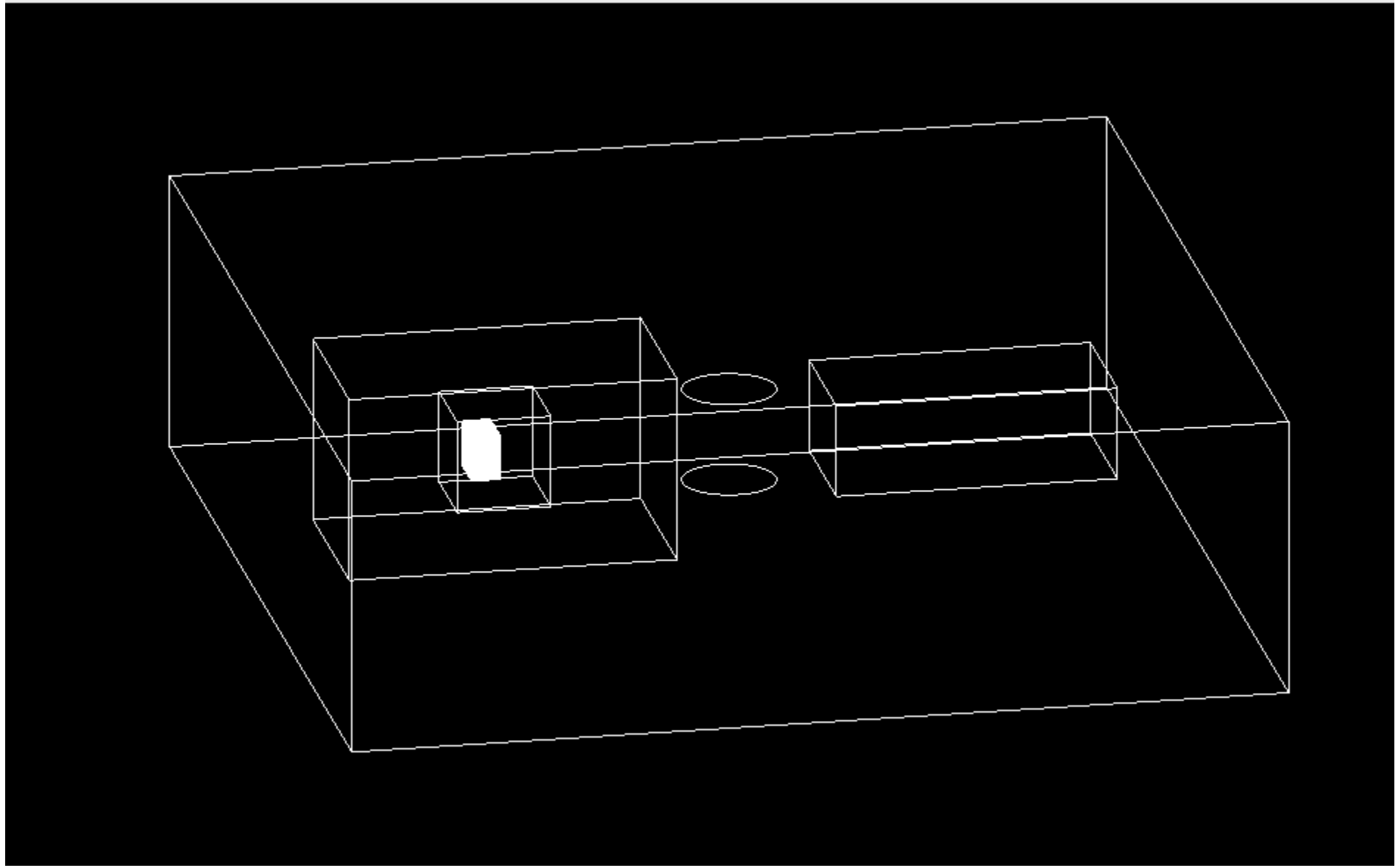
Weekly report

2019.12.17. Sora Oh

21radiation length

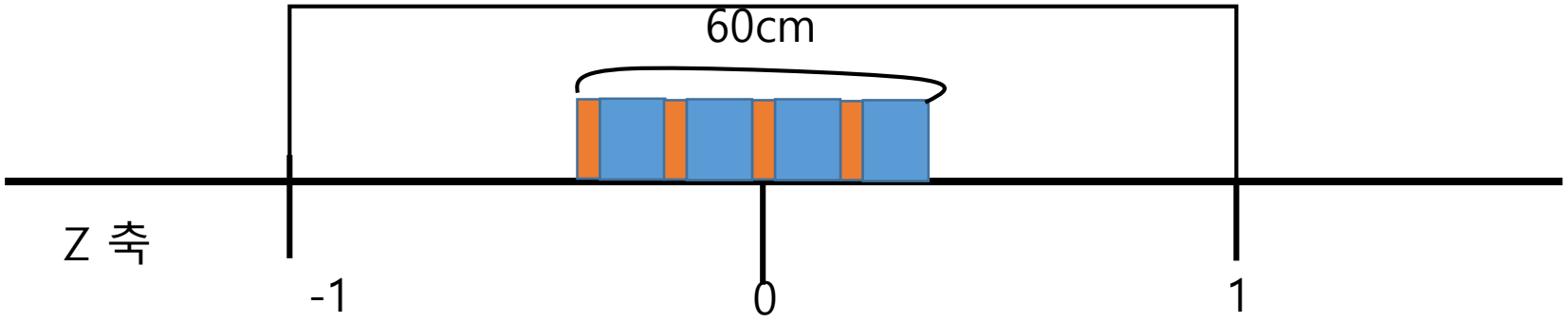
- 20 radiation length of lead = 0.5612cm*20=11.224cm
- 1 radiation length of scintillator = 42.4cm
- 21 radiation length of sandwiches = 53.624cm

- Number of sandwiches: 53.624cm/0.6cm=89.37 $-> 100$
- Size of sandwich : 60cm



Hadron calorimeter

- Second arm's



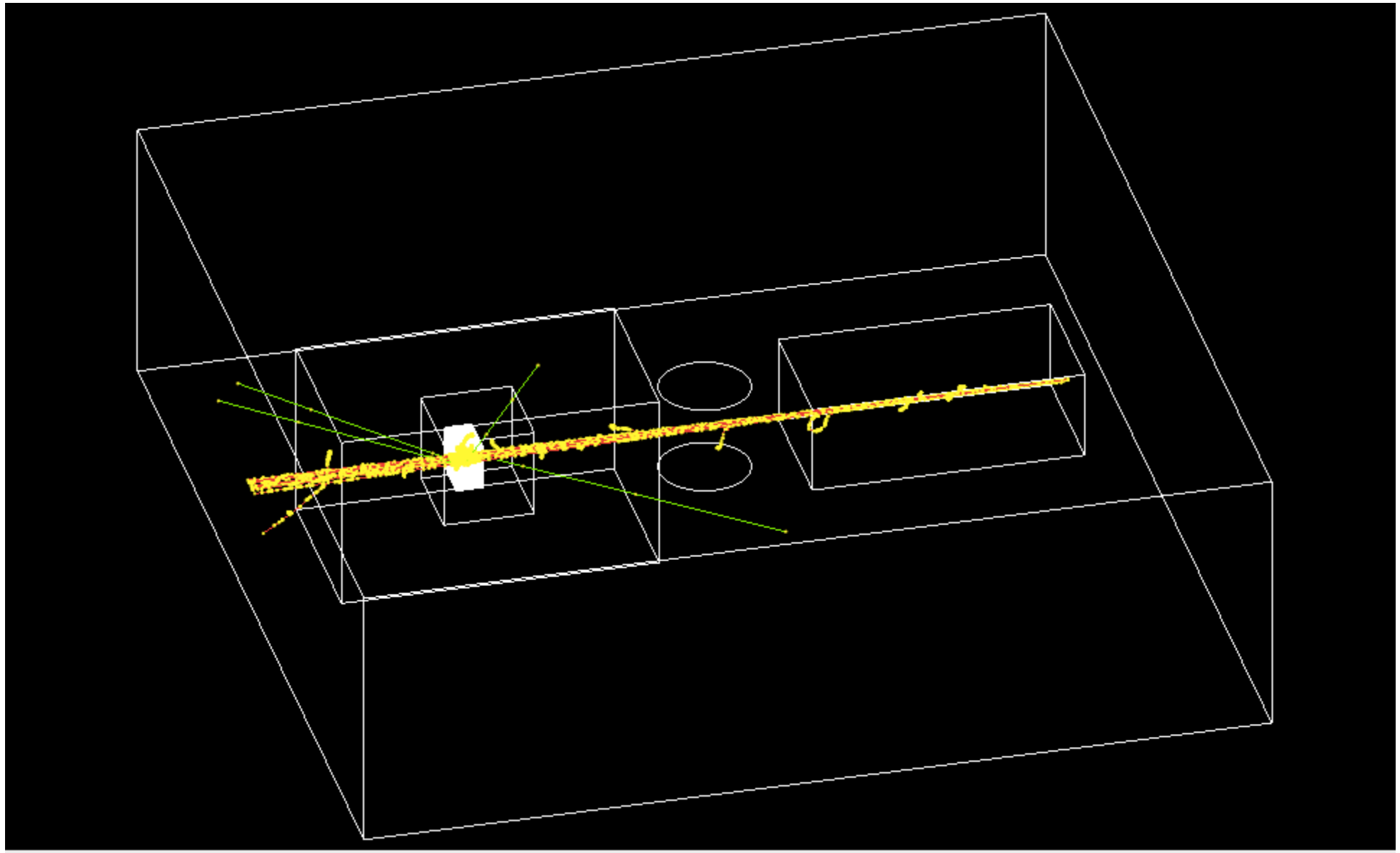
Scintillator

- auto HadCalScintiSolid = new G4Box("HadCalScintiSolid",50.*cm,50.*cm,2.5*mm);
- auto HadCalScintiLogical = new G4LogicalVolume(HadCalScintiSolid,scintillator,"HadCalScintiLogical");

- G4VPhysicalVolume* HadCalScintiPhysical[100];
- G4VPhysicalVolume* HadCalLeadPhysical[100];
- for (G4int i=0;i<100;i++)
- {
- G4double z1 = 0+0.6*i*cm;
- HadCalScintiPhysical[i] = new G4PVPlacement(0,G4ThreeVector(0.,0.,z1),HadCalScintiLogical,"HadCalScintiPhysical",hadCalorimeterLogical, false,i,checkOverlaps);

lead

- auto HadCalLeadSolid = new G4Box("HadCalLeadSolid",50.*cm,50.*cm,0.5*mm);
- auto HadCalLeadLogical = new G4LogicalVolume(HadCalLeadSolid,lead,"HadCalLeadLogical");
-
- for (G4int j=0;j<100;j++)
- {
- G4double z2 = 0.3+0.6*i*cm;
- HadCalLeadPhysical[j] = new G4PVPlacement(0,G4ThreeVector(0.,0.,z2),HadCalLeadLogical,"HadCalLeadPhysical",hadCalorimeterLogical, false,j,checkOverlaps);



Things to do

- Make root file