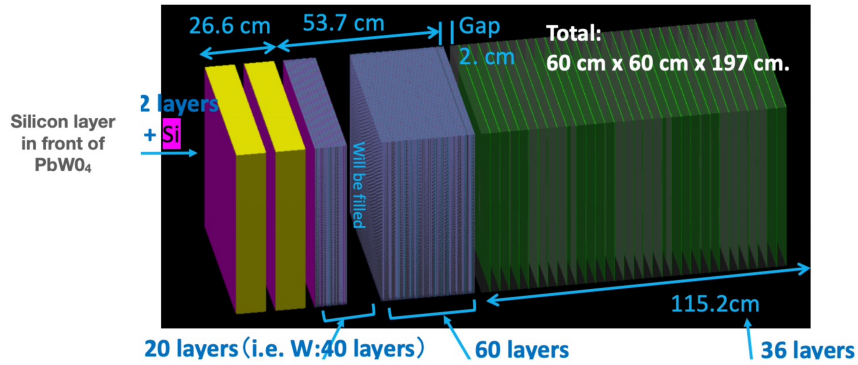


ZERO DEGREE CALORIMETER

eRD27 design – based on the ALICE FoCal

ZDC uses Silicon/PbW04 for EM followed Silicon/W for Hadronic Section

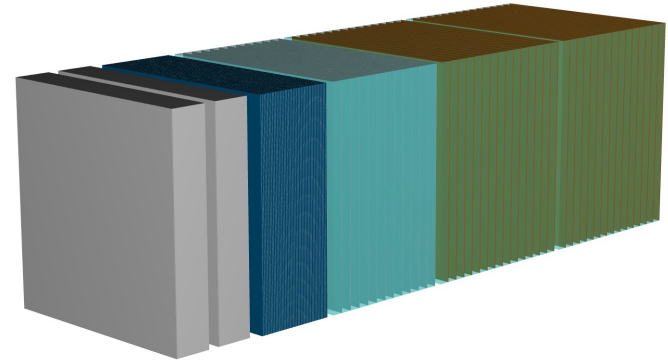


M. Murray and Q. Wang (U. Kansas), S. Shimizu (RIKEN)

Implemented in **ECCE Fun4All** simulation

Reference:

https://indico.bnl.gov/event/12006/contributions/50202/attachment/s/34832/56598/ATHENA_FF_working_group_5_27_2021.pdf



Implemented in **ATHENA DD4hep** framework

- ECAL
Silicon layer + PbWO₄ block (Grey)
- HCAL
Silicon layer + Tungsten layer (Blue)
Silicon layer + Pb layer (Cyan)
Scintillator layer + Pb layer (Green)

ZERO DEGREE CALORIMETER

eRD27 design – based on the ALICE FoCal

- Size: 60 cm × 60 cm × 2 m
- Position and length: parameterized using beampipe and layer parameters
- Readout: sensitive layers segmented according to the *Segmentation* object (layout of pixels) and recorded hits resulting from energy deposition
 - 2 sets of different pixels in a silicon (3 mm × 3 mm and 1 cm × 1 cm)
- Will set up a meeting with ECCE Fun4All simulation people to discuss some of the details of the implementation to make sure they are consistent
- Working on some particle gun script to test basic acceptance

FAR-FORWARD DETECTORS

