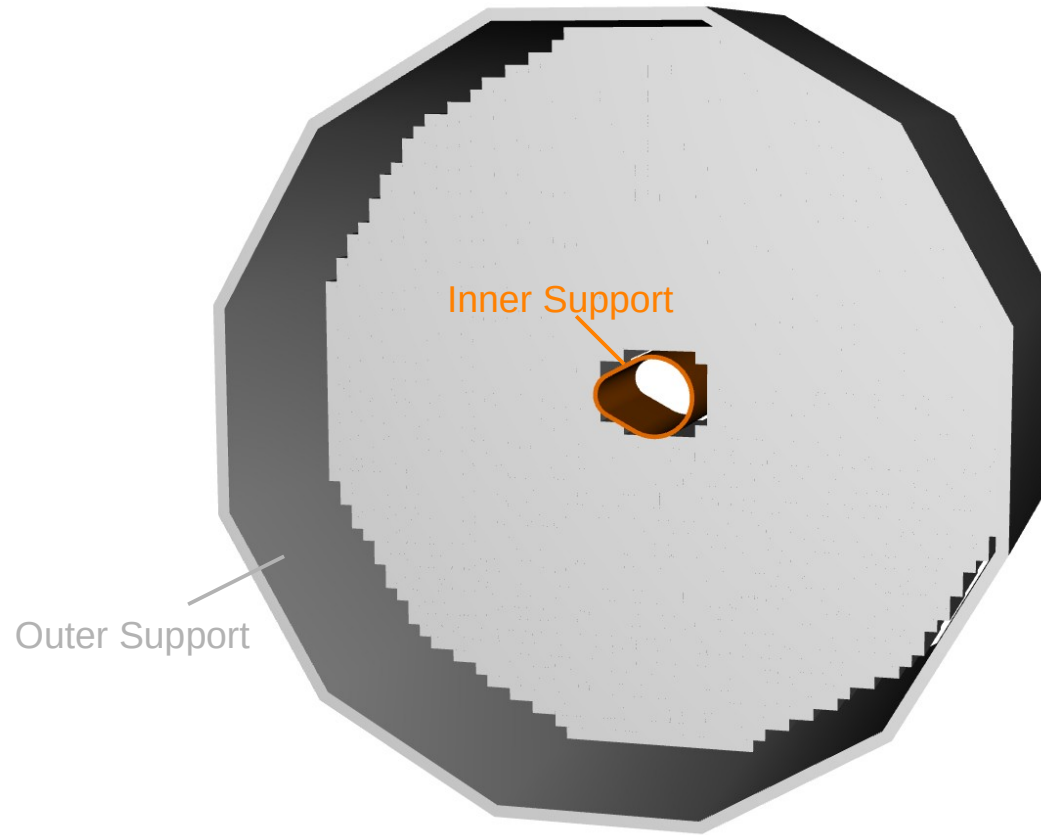


Test Beam Prototype Simulations

Artur Hoghmrtsyan



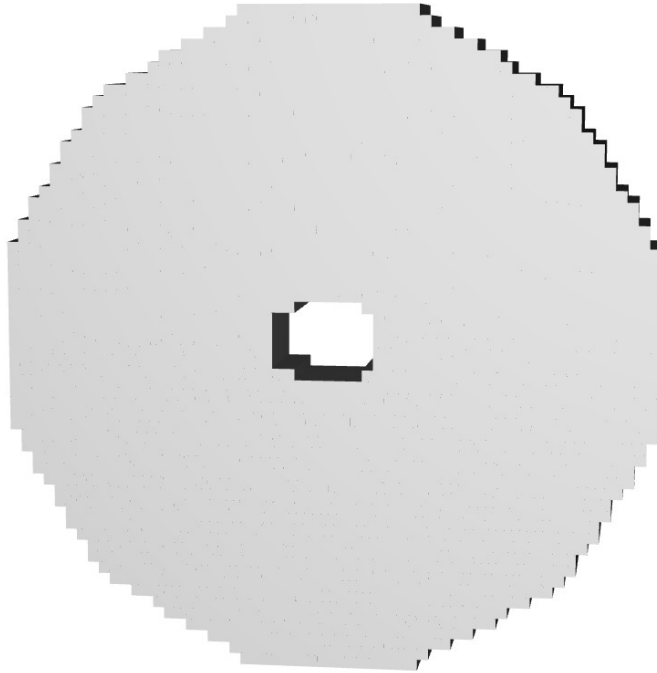
https://github.com/eic/epic/tree/main/build/epic_eeemcal_only.xml

Includes:

https://github.com/eic/epic/tree/main/compact/ecal/backward_PbWO4.xml

Created by:

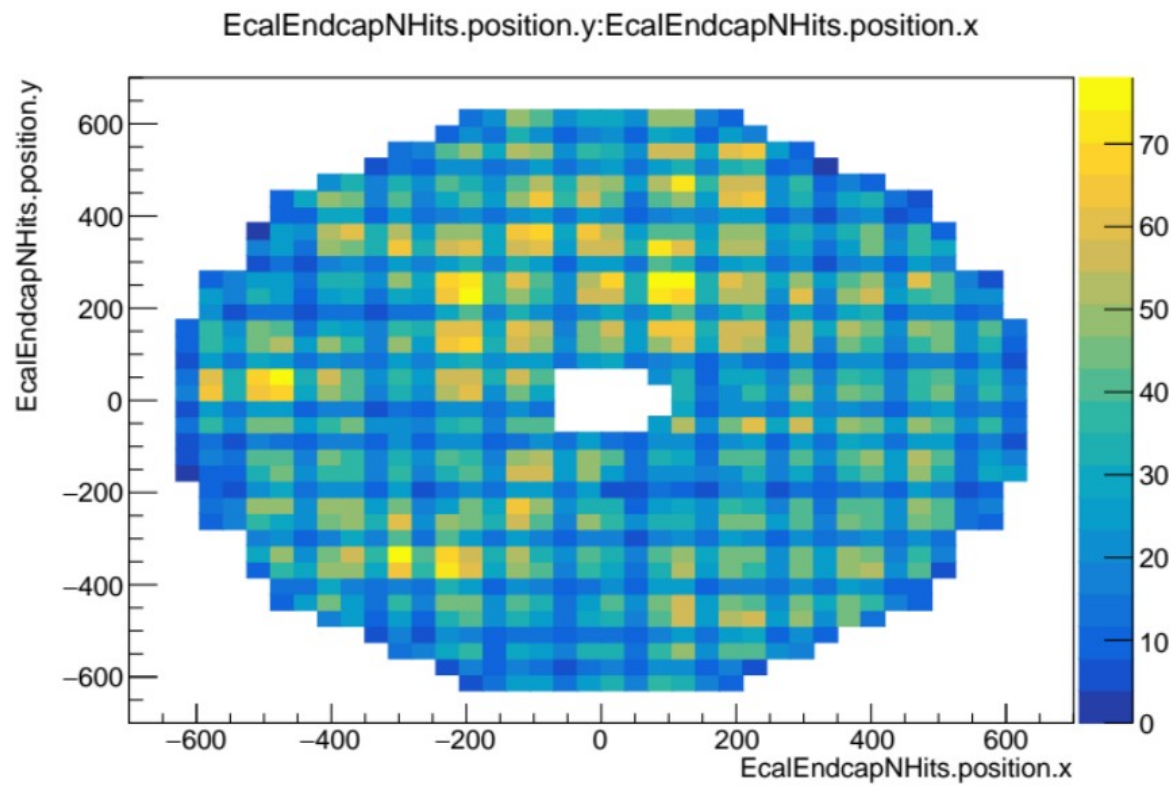
https://github.com/eic/epic/blob/main/src/HomogeneousCalorimeter_geo.cpp

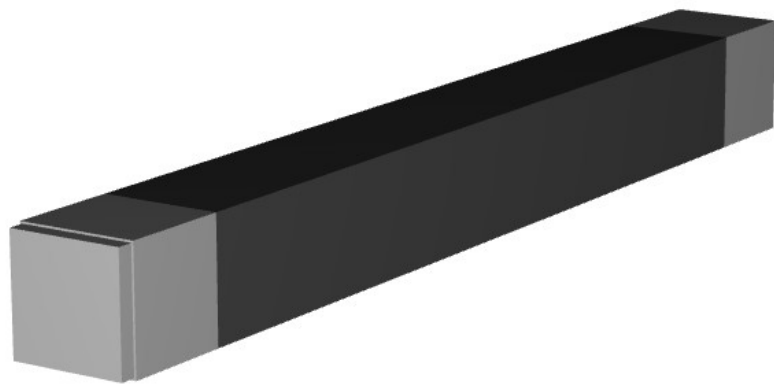


Inner and Outer supports were excluded.

Modules are placed in a 12 surface disk, with

Inner ring - 25 cm
Outer ring - 65 cm





Crystal

Width - 20.50 mm

Length - 200 mm

CarbonFiber thickness - 0.25 mm

VM2000 thickness - 0.13 mm

PCB thickness - 1.45 mm

Sensor (S14160 SiPM)

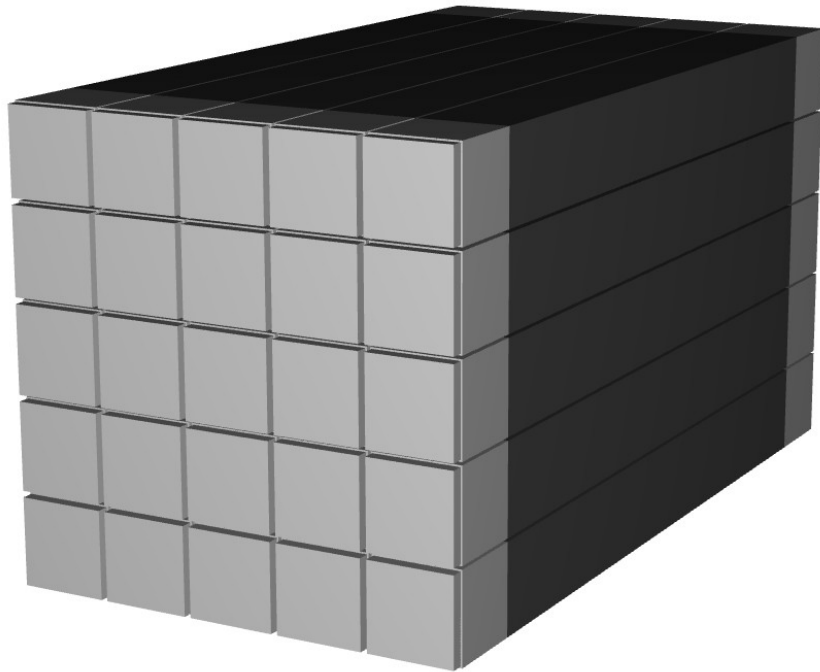
Size X - 6.85 mm

Size Y - 7.35 mm

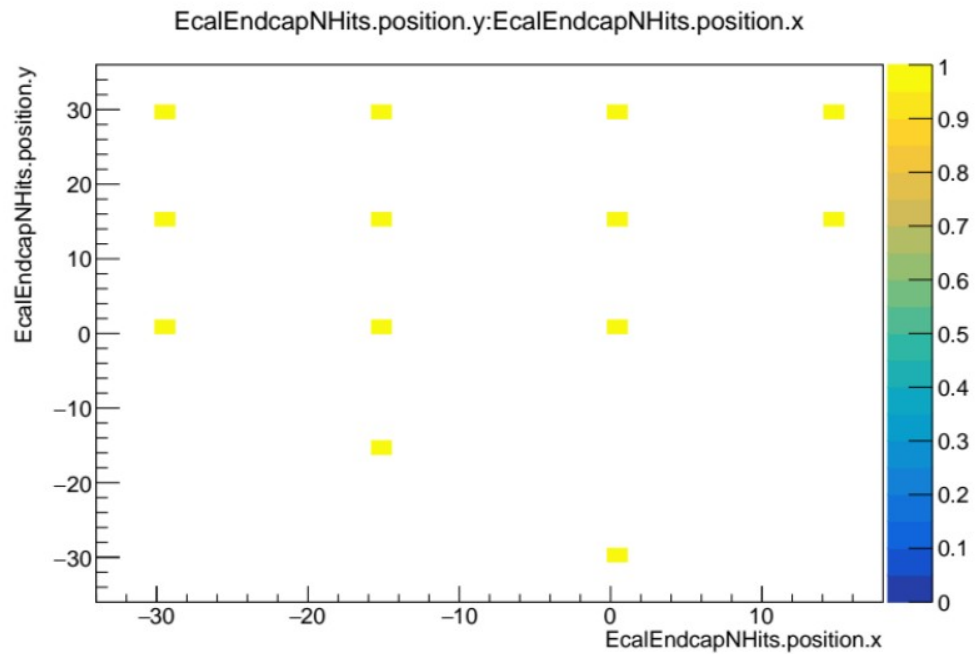
Spacing - 1 mm

Thickness - 1.45 mm

Matrix - 2x2



HomogeneousCalorimeter_geo.cpp and backward_PbWO4.xml have been modified to place modules in a matrix



The angles of the particle gun must be corrected for the simulations to be made.