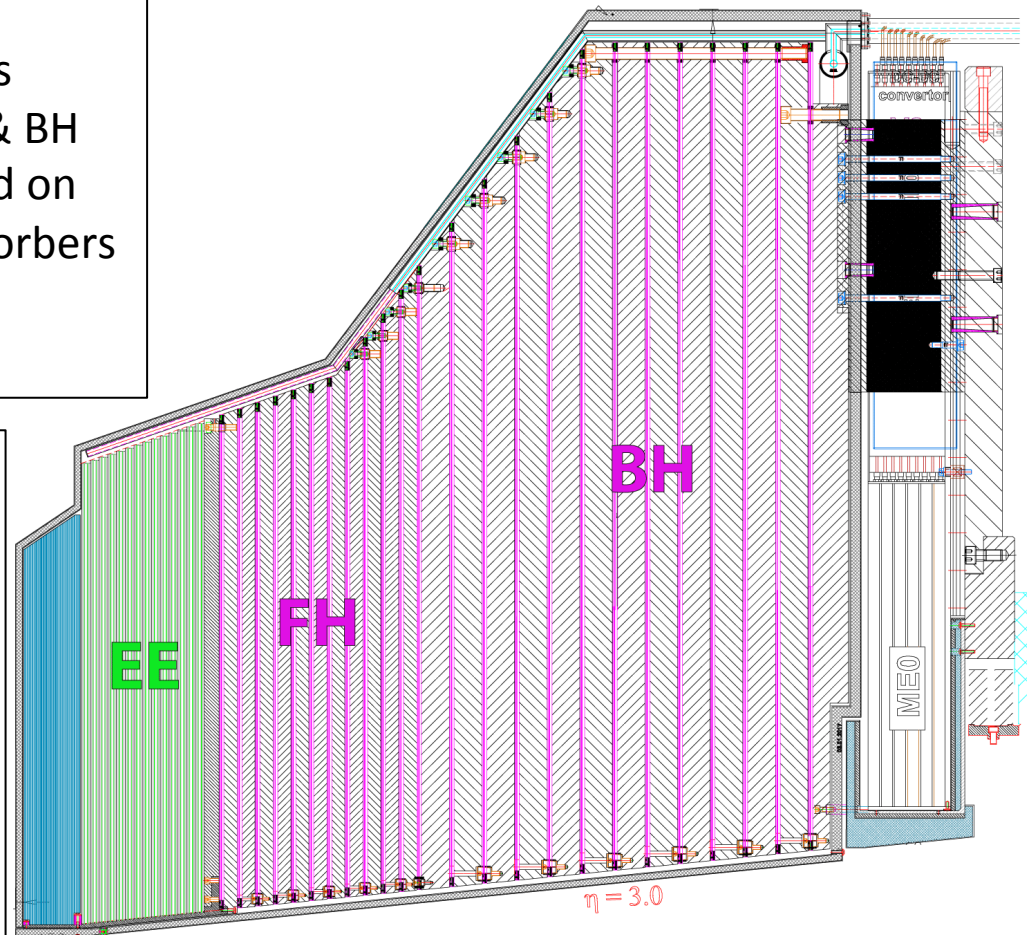


Active Elements:

- Hexagonal modules based on Si sensors in EE and high-radiation regions of FH & BH
- “Cassettes”: multiple modules mounted on cooling plates with electronics and absorbers
- Scintillating tiles with SiPM readout in low-radiation regions of FH & BH

Key Parameters:

- HGCAL covers $1.5 < \eta < 3.0$
- Full system maintained at -30°C
- $\sim 600\text{m}^2$ of silicon sensors
- $\sim 500\text{m}^2$ of scintillators
- 6M si channels, 0.5 or 1 cm^2 cell size
- ~ 22000 si modules
- Power at end of HL-LHC: ~ 60 kW per endcap



Endcap Electromagnetic calorimeter (EE): Si, Cu & CuW & Pb absorbers, 28 layers, $25 X_0$ & $\sim 1.3\lambda$

Front Hadronic calorimeter (FH): Si & scintillator, steel absorbers, 12 layers, $\sim 3.5\lambda$

Backing Hadronic calorimeter (BH): Si & scintillator, steel absorbers, 12 layers, $\sim 5\lambda$