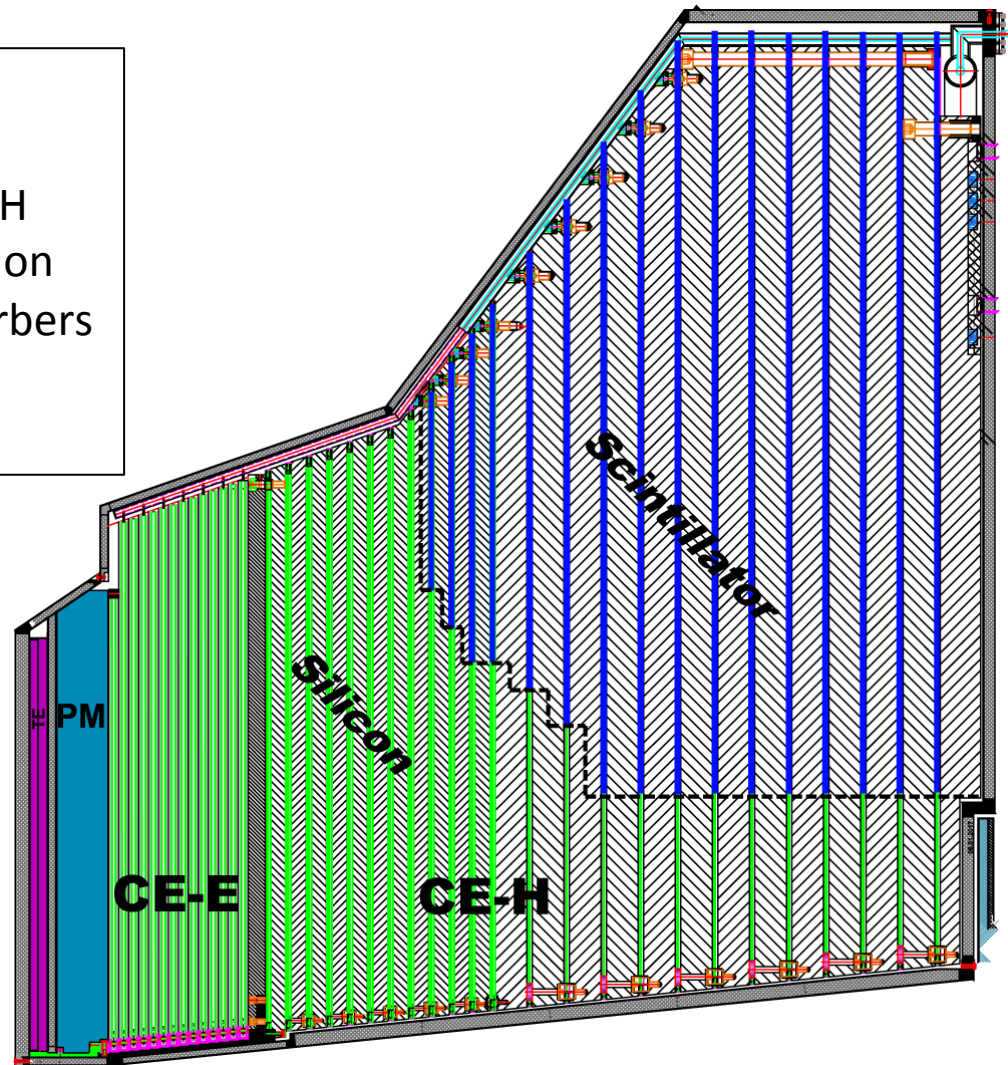


### Active Elements:

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

### Key Parameters:

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



Electromagnetic calorimeter (CE-E): **Si**, Cu & CuW & Pb absorbers, 28 layers,  $25 X_0$  &  $\sim 1.3\lambda$   
Hadronic calorimeter (CE-H): **Si** & **scintillator**, steel absorbers, 24 layers,  $\sim 8.5\lambda$