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Analysis of the cell pattern for partial modules

In the High Luminosity phase of the LHC, the High Granularity Calorimeter (HGCAL) are the planned replacement end-cap calorimeters to handle the increased radiation levels. HGCAL is a sampling calorimeter that uses silicon and plastic scintillators as active material. The talk goes over the intricacies of HGCAL geometry and their implementations in CMS Software Framework. The shape and dimensions of the cells in silicon wafers has been updated and validated to reflect the design. To improve the reconstruction, methods to extract the area and center of gravity for the cells in full and partial silicon wafers have been implemented and validated.

Field of contribution

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