

Combined CALOROC data model and direction of the digitization algorithm

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Combined CALOROC data model

edm4eic::RawCALOROC1Hit:

Description: "Raw hit from a CALOROC1A/B chip"

Members:

- uint64_t cellID
- int32_t samplePhase
- int32_t timeStamp

VectorMembers:

- edm4eic::CALOROC1ASample aSamples
- edm4eic::CALOROC1BSample bSamples

An individual sample output by a CALOROC1A chip

edm4eic::CALOROC1ASample:

Members:

- uint16_t ADC
- uint16_t timeOfArrival
- uint16_t timeOverThreshold
- bool TOTInProgress
- bool TOTComplete

An individual sample output by a CALOROC1B chip

edm4eic::CALOROC1BSample:

Members:

- uint16_t lowGainADC
- uint16_t highGainADC
- uint16_t timeOfArrival

- The RawHGCROCHit and RawCALOROC1BHit data models have been combined and renamed to RawCALOROC1Hit.
- The HGCROCSample has been renamed to CALOROC1ASample.

Direction of the digitization algorithm

- Since the RawCALOROHIT includes 1A and 1B samples, the digitization algorithm will measure both.

It should be useful for detectors that want to compare the performance of the two chips.

Now that the digitization algorithm measures both samples, the algorithm name PulseDigi doesn't seem to need to be more specific.

- Once the chip type to be used in the ePIC experiment is decided, the unused chip part will be removed from both data model and digitization algorithm.