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Performance of the local reconstruction algorithms for the CMS hadron calorimeter in Run-2 data

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We report various energy reconstruction algorithms used by the CMS hadron calorimeter (HCAL) during the LHC Run-2. The signal pulse of deposited energy in the HCAL subdetector is a function of time, and hence it overlaps with adjacent pulses due to the high pileup scenario and short proton-proton bunch crossing time (25 ns). The correct contribution of the signal pulse can be estimated using the known pulse shapes of the energy deposition. The talk describes the performance of the algorithms developed to mitigate the effect of adjacent bunch crossings on the local HCAL energy reconstruction in Run 2.

Session

Future Experiments and Detector Development

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