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Abstract :

We report various energy reconstruction algorithms used by the CMS hadron calorimeter (HCAL)
during Run 2 of the LHC. During Run 2, the characteristic bunch-crossing spacing for proton-
proton collisions was 25 ns, which resulted in overlapping signals from adjacent crossings. The
energy corresponding to a particular bunch crossing of interest can be estimated using the known
pulse shapes of energy depositions in the calorimeter. In this talk, we describe the performance of
the algorithms that were developed to mitigate the effects of adjacent bunch crossings on local
HCAL energy reconstruction in Run 2.