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Type: **Experiment**

MET performance at 8 TeV in CMS

We present the performance of missing transverse momentum (MET) reconstruction in CMS, using 8 TeV pp collision data corresponding to an integrated luminosity up to $12.2 \pm 0.5 \text{ fb}^{-1}$. Events with anomalous MET are studied, and the performance of algorithms used to identify those events is presented. The scale and resolution for MET, including the effects of multiple pp interactions in the same and neighboring bunch crossings (pileup interactions), are measured using events with an identified Z boson or isolated photon. Advanced MET reconstruction algorithms are also developed specifically to mitigate the effects of large numbers of pileup interactions on MET resolution. Using these advanced algorithms we show that the dependence of the MET resolution on pileup interactions is reduced significantly.

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