

QCD Monte-Carlo model tuning studies with CMS data at 13 TeV

Tuesday 12 December 2017 10:00 (15 minutes)

New CMS PYTHIA 8 event tunes are presented. The new tunes are obtained using minimum bias and underlying event observables using Monte Carlo configurations with consistent parton distribution functions and strong coupling constant values in the matrix element and the parton shower. Validation and performance studies are presented by comparing the predictions of the new tune to various soft- and hard-QCD measurements at 7, 8 and 13 TeV with CMS.

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