

Abstract Submitted
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Initial Measurement of the Inclusive Jet Cross Section at 10 TeV with CMS KEITH ROSE, Rutgers University, CMS COLLABORATION — A plan for the measurement of the differential inclusive jet production cross section at the Compact Muon Solenoid experiment (CMS) assuming 10/pb of integrated luminosity from proton-proton collisions at a center of mass energy of 10 TeV is presented. The reach in transverse jet momentum is beyond any previous collider experiment and the TeV scale of jet physics can be probed. The analysis is performed on fully simulated CMS events which are adopted as pseudo data. Jets are reconstructed from calorimeter energy depositions with two different algorithms; Inclusive kT and Seedless Infrared-Safe Cone. The steps for the spectrum construction from triggered events are described in detail and the major experimental and theoretical uncertainties are discussed. A simple noise rejection cut is also proposed for the purpose of event cleanup.

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