

## Leading track and leading jet cross sections at small transverse momenta

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The production yields of leading charged-particle jets and tracks in proton-proton collisions are measured at  $\sqrt{s} = 8$  TeV based on a data sample of  $17.4 \text{ pb}^{-1}$  collected with the CMS detector. The charged-particle jets (tracks) are measured in the pseudorapidity range  $|\eta| < 2.0$  ( $2.4$ ) for transverse momenta  $p_T > 1$  ( $0.8$ ) GeV. The yield distribution integrated over a given minimum transverse momentum  $p_{T\text{min}}$ , falls steeply with increasing  $p_{T\text{min}}$ , and provides information on the mechanism by which the underlying parton-parton cross sections are unitarized approaching the low- $p_T$  non-perturbative domain. Predictions obtained from various Monte Carlo event generators are compared to the measurements.

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