

High-energy resummation effects in Mueller-Navelet jet production at the LHC

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The study of the production of two forward jets with a large interval of rapidity at hadron colliders was proposed by Mueller and Navelet as a possible test of the high energy dynamics of QCD. We analyze this process within a complete next-to-leading logarithm framework, supplemented by the use of the Brodsky-Lepage-Mackenzie procedure extended to the perturbative Regge dynamics, to find the optimal renormalization scale. This leads to a very good description of the recent CMS data at LHC for the azimuthal correlations of the jets.

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