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Volume 79, Issue 1, 1 January 2019, Article number 20Measurement of differential cross sections for inclusive isolated-photon and photon+jet production in proton-proton collisions at $\sqrt{s}=13\text{TeV}$ (Article)[\(Open Access\)](#)Sirunyan, A.M.^a, Tumasyan, A.^a, Adam, W.^b, Ambrogio, F.^b, Asilar, E.^b, Bergauer, T.^b, Brandstetter, J.^b, Brondolin, E.^b, Dragicevic, M.^b, Erö, J.^b, Del Valle, A.E.^b, Flechl, M.^b, Frühwirth, R.^b, Ghete, V.M.^b, Hrubec, J.^b, Jeitler, M.^b, Krammer, N.^b, Krätschmer, I.^b, Liko, D.^b, Madlener, T.^b, Mikulec, I.^b, Rad, N.^b, ...[View additional authors](#) ^aYerevan Physics Institute, Yerevan, Armenia^bInstitut für Hochenergiephysik, Wien, Austria^cInstitute for Nuclear Problems, Minsk, Belarus[View additional affiliations](#)

Abstract

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Measurements of inclusive isolated-photon and photon+jet production in proton-proton collisions at $s=13\text{TeV}$ are presented. The analysis uses data collected by the CMS experiment in 2015, corresponding to an integrated luminosity of 2.26fb^{-1} . The cross section for inclusive isolated photon production is measured as a function of the photon transverse energy in a fiducial region. The cross section for photon+jet production is measured as a function of the photon transverse energy in the same fiducial region with identical photon requirements and with the highest transverse momentum jet. All measurements are in agreement with predictions from next-to-leading-order perturbative QCD. © 2019, CERN for the benefit of the CMS Collaboration.

SciVal Topic Prominence

Topic: jets | production | parton shower

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(2017) *Physics Letters, Section B:
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