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Erratum

Erratum to: Study of dijet events with a large rapidity gap between the two leading jets in pp collisions at $\sqrt{s} = 7$ TeV

CMS Collaboration*

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This erratum corrects the dedication in the PDF version of the original published manuscript: *diractive processes* should be *diffractive processes*.

Abstract Events with no charged particles produced between the two leading jets are studied in proton–proton collisions at $\sqrt{s} = 7$ TeV. The jets were required to have transverse momentum $p_T^{\text{jet}} > 40$ GeV and pseudorapidity $1.5 < |\eta^{\text{jet}}| < 4.7$, and to have values of η^{jet} with opposite signs. The data used for this study were collected with the CMS detector during low-luminosity running at the LHC, and correspond to an integrated luminosity of 8 pb^{-1} . Events with no charged particles with $p_T > 0.2$ GeV in the interval $-1 < \eta < 1$ between the jets are observed in excess of calculations that assume no color-singlet exchange. The fraction of events with such a rapidity gap, amounting to 0.5–1% of the selected dijet sample, is measured as a function of the p_T of the

second-leading jet and of the rapidity separation between the jets. The data are compared to previous measurements at the Tevatron, and to perturbative quantum chromodynamics calculations based on the Balitsky–Fadin–Kuraev–Lipatov evolution equations, including different models of the non-perturbative gap survival probability.

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The original article can be found online at <https://doi.org/10.1140/epjc/s10052-018-5691-6>.

We dedicate this paper to the memory of our colleague and friend Sasha Proskuryakov, who started this analysis but passed away before it was completed. His contribution to the study of diffractive processes at CMS is invaluable.

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