Physics Letters B 800 (2020) 135129

Contents lists available at ScienceDirect

Physics Letters B

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Corrigendum

Corrigendum to "Transverse extension of partons in the proton probed in the sea-quark range by measuring the DVCS cross section" [Phys. Lett. B 793 (2019) 188]

The COMPASS Collaboration

ARTICLE INFO

Article history:
Available online 3 December 2019

This Corrigendum refers to a previous letter [1] (PLB 793 (2019) 188) published by the COMPASS collaboration using a data sample taken in 2012.

Here we give an update of Fig. 5 of Ref. [1]. The following corrections were applied: In both Fig. 1 a) and b) the unit of the slope B has been corrected. In the Fig. 1 a) the scale on the right for $\langle r_\perp^2 \rangle$ has been updated.

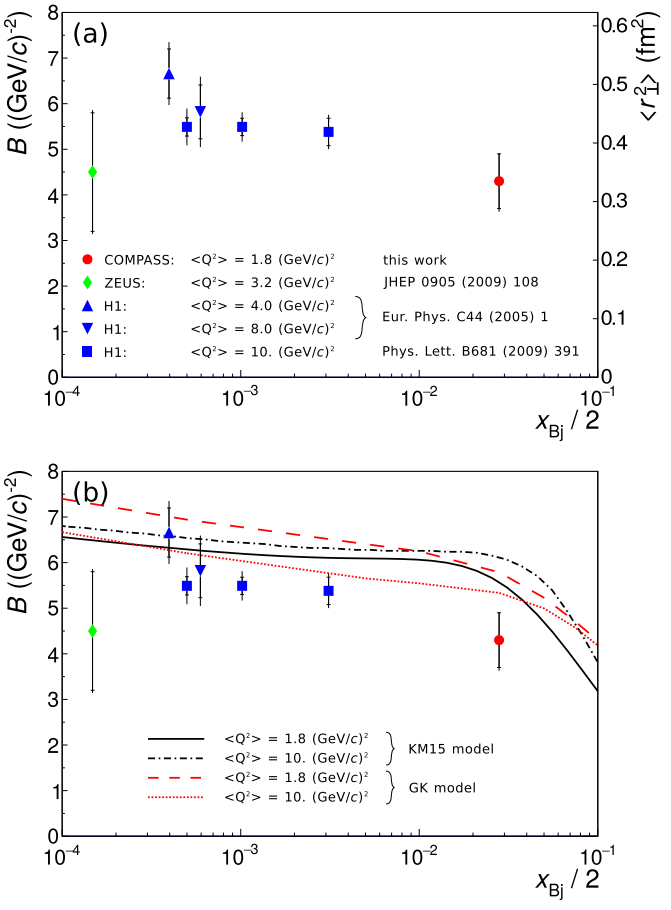

Fig. 1. (a) Results from COMPASS and previous measurements by H1 [2,3] and ZEUS [4] on the t-slope parameter B, or equivalently the average squared transverse extension of partons in the proton, $\langle r_\perp^2 \rangle$, as probed by DVCS at the proton longitudinal momentum fraction $x_{Bj}/2$ (see text [1]). Inner error bars represent statistical and outer ones the quadratic sum of statistical and systematic uncertainties. (b) Same results compared to the predictions of the GK [5–7] and KM15 [8,9] models.

DOI of original article: https://doi.org/10.1016/j.physletb.2019.04.038.

https://doi.org/10.1016/j.physletb.2019.135129

References

[1] R. Akhunzyanov, et al., COMPASS Collaboration, Phys. Lett. B 793 (2019) 188.
[2] A. Aktas, et al., H1 Collaboration, Eur. Phys. J. C 44 (2005) 1.
[3] F.D. Aaron, et al., H1 Collaboration, Phys. Lett. B 681 (2009) 391.
[4] S. Chekanov, et al., ZEUS Collaboration, J. High Energy Phys. 05 (2009) 108.
[5] S.V. Goloskokov, P. Kroll, Eur. Phys. J. C 42 (2005) 281.
[6] S.V. Goloskokov, P. Kroll, Eur. Phys. J. C 53 (2008) 367.
[7] S.V. Goloskokov, P. Kroll, Eur. Phys. J. C 65 (2010) 137.
[8] K. Kumericki, D. Müller, Nucl. Phys. B 841 (2010) 1.
[9] K. Kumericki, D. Müller, EPJ Web Conf. 112 (2016) 01012.

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