Erratum: Matching and event-shape NNDL accuracy in parton showers

Keith Hamilton,[a] **Alexander Karlberg,**[b,c] **Gavin P. Salam,**[b,d] **Ludovic Scyboz**[b] **and Rob Verheyen**[a]

[a]*Department of Physics and Astronomy, University College London,*
 London, WC1E 6BT, U.K.

[b]*Rudolf Peierls Centre for Theoretical Physics, Clarendon Laboratory,*
 Parks Road, University of Oxford, Oxford OX1 3PU, U.K.

[c]*CERN, Theoretical Physics Department,*
 CH-1211 Geneva 23, Switzerland

[d]*All Souls College,*
 Oxford OX1 4AL, U.K.

 E-mail: keith.hamilton@ucl.ac.uk, alexander.karlberg@cern.ch,
 gavin.salam@physics.ox.ac.uk, ludovic.scyboz@physics.ox.ac.uk,
 r.verheyen@ucl.ac.uk

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ABSTRACT: This document reports corrections for typographical errors in equations (1.1) and (A.4) of ref. [1]. No other content is affected.

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- The $C_1 \alpha_s$ term in equation (1.1) of ref. [1] should instead read $\frac{\alpha_s}{2\pi} C_1$, for consistency with the conventions of ref. [2] which are subsequently adopted in the article.

- The = sign directly following lim in equation 4.1 is spurious and should be omitted.

- Equation (A.4) of ref. [1], gives the general form of the cumulative cross section for global event-shape observables and the two-jet rate expanded to order α_s. This equation should read instead as follows,

$$\Sigma(O < e^L) = 1 + \frac{\alpha_s}{2\pi} \left[G_{12} L^2 + G_{11} L + C_1 \right],\tag{1}$$

in keeping with the conventions of ref. [2].

References

[1] K. Hamilton et al., *Matching and event-shape NNDL accuracy in parton showers*, *JHEP* **03** (2023) 224 [`arXiv:2301.09645`] [ɪɴSPIRE].

[2] S. Catani, L. Trentadue, G. Turnock and B.R. Webber, *Resummation of large logarithms in e^+e^- event shape distributions*, *Nucl. Phys. B* **407** (1993) 3 [ɪɴSPIRE].