Erratum: On the structure of infrared singularities of gauge-theory amplitudes

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The expression for the quantity $H_{\text{R.S.}}^{(2)}(\epsilon)$ in equation (2.17) of the paper is incomplete. The result for $H_{\text{R.S.}}^{(2)}(\epsilon)$ must include the additional term

$$\Delta H_{\text{R.S.}}^{(2)}(\epsilon) = -\frac{if^{abc}}{128\epsilon} \gamma_0^{\text{cusp}} \sum_{(i,j,k)} T_i^a T_j^b T_k^c \left(\frac{\gamma_0^i}{C_i} - \frac{\gamma_0^j}{C_j} \right) \ln \frac{-s_{ij}}{-s_{jk}} \ln \frac{-s_{ki}}{-s_{ij}}. \quad (2.17)$$

This extra contribution was discussed in appendix D of [1], where it was shown that it only contributes for amplitudes with more than four particles. The form (2.17) of the extra term was given in the recent paper [2].

References

- [1] S.M. Aybat, L.J. Dixon and G.F. Sterman, *The two-loop soft anomalous dimension matrix and resummation at next-to-next-to leading pole*, *Phys. Rev. D* **74** (2006) 074004 [[hep-ph/0607309](#)] [[INSPIRE](#)].
- [2] T. Becher, G. Bell, C. Lorentzen and S. Marti, *Transverse-momentum spectra of electroweak bosons near threshold at NNLO*, [arXiv:1309.3245](#) [[INSPIRE](#)].