

## Erratum: Elements of a theory for multiparton interactions in QCD

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1. In equations (3.41) and (3.42), all terms  $v^+v^-$  should be changed into  $v^+w^-$ .
2. The second part of equation (4.25) correctly reads

$$M_{a_1, a_2}^{n_1, n_2}(\mathbf{y}^2) = \frac{1}{2} (p^+)^{1-n_1-n_2} \int dy^- \langle p | \mathcal{O}_{a_1}^{+\dots+}(0) \mathcal{O}_{a_2}^{+\dots+}(y) | p \rangle_{y^+=0}$$

with a factor 1/2 instead of 2.

3. Equation (5.75) correctly reads

$$\left[ \prod_{i=1}^2 \int d^2 \mathbf{k}_i \right] {}^1F_{a_1, \bar{a}_2}(x_i, \mathbf{k}_i, \mathbf{r}) \Big|_{g \rightarrow q\bar{q}} = \frac{\alpha_s}{4\pi^2} \frac{1}{x_1 + x_2} f_1^g(x_1 + x_2) T_{a_1, \bar{a}_2}^{ll'} \left( \frac{x_1}{x_1 + x_2} \right) \times \int d^2 \mathbf{k} \frac{(\mathbf{k} + \frac{1}{2} \mathbf{r})^l (\mathbf{k} - \frac{1}{2} \mathbf{r})^{l'}}{(\mathbf{k} + \frac{1}{2} \mathbf{r})^2 (\mathbf{k} - \frac{1}{2} \mathbf{r})^2},$$

i.e. the factors  $(2\pi)^2$  should be omitted on both sides.

4. Together with the surrounding text, equation (5.78) for the double parton distribution in  $4 - 2\epsilon$  dimensions should read:

The result for  $F_{q, \bar{q}}(x_i, \mathbf{k}_i, \mathbf{r})$  is then the same as in (5.42) with a modified kernel

$$T_{q, \bar{q}}^{ll'}(u; \epsilon) = \delta^{ll'} [u^2 + (1-u)^2 - \epsilon] / (1-\epsilon)$$

times a power of  $(2\pi)^\epsilon$  we need not specify here.

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