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

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

with a factor $1/2$ instead of 2.

3. Equation (5.75) correctly reads

$$\left[\prod_{i=1}^{2} \int d^2\boldsymbol{k}_i\right] {}^1F_{a_1, \bar{a}_2}(x_i, \boldsymbol{k}_i, \boldsymbol{r})\Big|_{g \to q\bar{q}} = \frac{\alpha_s}{4\pi^2}\frac{1}{x_1 + x_2} f^g_1(x_1 + x_2)\, T^{ll'}_{a_1, \bar{a}_2}\left(\frac{x_1}{x_1 + x_2}\right)$$
$$\times \int d^2\boldsymbol{k}\, \frac{\left(\boldsymbol{k} + \frac{1}{2}\boldsymbol{r}\right)^l \left(\boldsymbol{k} - \frac{1}{2}\boldsymbol{r}\right)^{l'}}{\left(\boldsymbol{k} + \frac{1}{2}\boldsymbol{r}\right)^2 \left(\boldsymbol{k} - \frac{1}{2}\boldsymbol{r}\right)^2},$$

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

$$T^{ll'}_{q,\bar{q}}(u; \epsilon) = \delta^{ll'}\left[u^2 + (1-u)^2 - \epsilon\right]/(1-\epsilon)$$

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