Erratum: Model independent evaluation of the Wilson coefficient of the Weinberg operator in QCD

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We have found that a factor 1/2 should be multiplied by eq. (4.1) of the paper when we use the same vertex twice. For instance, the Wilson coefficient of the Weinberg operator (C_G) induced by

$$\mathcal{L} \supset -\bar{\psi} A g_{\bar{A}AS} \psi_A S, \quad (1)$$

with $S^* = S$ and $g_{\bar{A}AS} = X_{\bar{A}AS}(s + \gamma_5 a)$ is calculated as

$$\begin{aligned} C_G = & -\frac{1}{2} \frac{1}{(4\pi)^4} 6 \text{Im}(sa^*) m_A^2 \\ & \times \left\{ \left(X T_A T_A X^\dagger \right) f_1(m_A^2, m_A^2, m_S^2) + \left(X X^\dagger T_A T_A \right) f_1(m_A^2, m_A^2, m_S^2) \right. \\ & \left. + 2 \left(X T_A X^\dagger T_A \right) \left[f_2(m_A^2, m_A^2, m_S^2) \right] \right\}, \quad (2) \end{aligned}$$

where f_1 and f_2 are defined in eqs. (3.28) and (3.29). We have checked that the eq. (2) is consistent with the results reported in refs. [1–3].

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