

Erratum: Lattice calculation of the leading strange quark-connected contribution to the muon $g - 2$

The RBC/UKQCD collaboration

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We have identified two minor errors in our published manuscript, which have no bearing on our calculations or results.

In equation (3.2) the upper limit of the summation should be $n - 1$ rather than $m - 1$. The correct expression therefore is

$$R_{mn}(\hat{Q}^2) = \Pi_0 + \hat{Q}^2 \left(\sum_{i=0}^{n-1} \frac{a_i}{b_i + \hat{Q}^2} + \delta_{mn} c \right), \quad n = m, m + 1. \quad (3.2)$$

In equation (3.1) there is a confusion of sign conventions when specifying $\Pi(Q^2)$. The correct expression is achieved by flipping the sign on $Q^2\Phi(Q^2)$, giving

$$\Pi(Q^2) = \Pi(0) + Q^2\Phi(Q^2), \quad \Phi(Q^2) = \int_{4m_\pi^2}^{\infty} dt \frac{\rho(t)}{t(t + Q^2)}. \quad (3.1)$$

We wish to emphasise that neither of these corrections change the nature of our calculations, the associated results, or the conclusions of our original manuscript: the first correction is merely typographical and the second is a transcription error.

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