Erratum to: Local-duality QCD sum rules for strong isospin breaking in the decay constants of heavy–light mesons

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We correct Eq. (1) of the original paper, where the term describing nonperturbative power corrections was not displayed (although taken into account in the analysis). In Eqs. (33) and (34) of the original paper, the references to the wrong bibitems were shown; these are corrected. All material of the paper, except for these typos, remains valid and unchanged.

I. In Eq. (1) of the original paper, the term describing power corrections, $\Pi_{\text{power}}^{(N)}$, was not shown. The correct Eq. (1) reads

$$\begin{aligned} f_H^2 (M_H^2)^N e^{-M_H^2 \tau} \\ s_{\text{eff}}^{(N)}(\tau, m_Q, m_q, \alpha_s) \\ = \int_{(m_Q+m_q)^2}^{\infty} ds e^{-s\tau} s^N \rho_{\text{pert}}(s, m_Q, m_q, \alpha_s) \\ + \Pi_{\text{power}}^{(N)}(\tau, m_Q, m_q, \alpha_s, \langle \bar{q}q \rangle, \dots). \end{aligned} \quad (1)$$

II. In Eqs. (33) and (34) of the original paper, the references were not linked correctly. The references in Eq. (33) should read:

$$\begin{aligned} (\bar{m}_d - \bar{m}_u)(2 \text{ GeV}) &= (2.67 \pm 0.22) \text{ MeV} [1,2], \\ \bar{m}_{ud}(2 \text{ GeV}) &\equiv \frac{\bar{m}_u + \bar{m}_d}{2} = (3.70 \pm 0.17) \text{ MeV} [1,2], \\ \bar{m}_s(2 \text{ GeV}) &= (93.9 \pm 1.1) \text{ MeV} [1,2], \\ \bar{m}_c(\bar{m}_c) &= (1.275 \pm 0.025) \text{ GeV} [3], \\ \bar{m}_b(\bar{m}_b) &= (4.247 \pm 0.034) \text{ GeV} [4], \\ \alpha_s(M_Z) &= 0.1182 \pm 0.0012 [1,2], \end{aligned} \quad (33)$$

whereas the correct references in Eq. (34) are as follows:

$$\begin{aligned} f_D &= (212.15 \pm 1.45) \text{ MeV}, \quad \frac{f_{D_s}}{f_D} = 1.1716 \pm 0.0032 [1,2], \\ f_{D^*} &= (223.5 \pm 8.3) \text{ MeV}, \quad \frac{f_{D_s^*}}{f_{D^*}} = 1.203 \pm 0.054 [5], \\ f_B &= (186.0 \pm 4.0) \text{ MeV}, \quad \frac{f_{B_s}}{f_B} = 1.205 \pm 0.007 [1,2], \\ f_{B^*} &= (186.4 \pm 7.1) \text{ MeV}, \quad \frac{f_{B_s^*}}{f_{B^*}} = 1.197 \pm 0.055 [5]. \end{aligned} \quad (34)$$

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References

1. S. Aoki et al., Eur. Phys. J. C **77**, 112 (2017). [arXiv:1607.00299](https://arxiv.org/abs/1607.00299) [hep-lat]
2. S. Aoki et al., Eur. Phys. J. C **74**, 2890 (2014). [arXiv:1310.8555](https://arxiv.org/abs/1310.8555) [hep-lat]
3. C. Patrignani et al. (Particle Data Group), Chin. Phys. C **40**, 100001 (2016)
4. W. Lucha, D. Melikhov, S. Simula, Phys. Rev. D **88**, 056011 (2013). [arXiv:1305.709](https://arxiv.org/abs/1305.709) [hep-ph]
5. V. Lubicz et al. (ETM Collaboration), Phys. Rev. D **96**, 034524 (2017). [arXiv:1707.04529](https://arxiv.org/abs/1707.04529) [hep-lat]

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