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Erratum

Erratum to: “Why the $f_0(980)$ is mostly $s\bar{s}$ ” [Phys. Lett. B 495 (2000) 300] [☆]

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The factor $\sqrt{2}$ in the denominator on the right-hand side of Eq. (3) should instead be a factor 2. This follows from the W^+ -emission (or vacuum-saturation) amplitude for Cabibbo-angle-enhanced weak decays, as given, e.g., in Eqs. (4a)–(4c) of Ref. [1], which concerns the analogue parity-violating weak decay $D^0 \rightarrow \pi^+ K^-$. So Eq. (3) of the present Letter should correctly read for the parity-conserving weak decay $D_s^+ \rightarrow f_0(980)\pi^+$:

$$|\mathcal{M}(D_s^+ \rightarrow f_0(980)\pi^+)|_{W^+\text{-emission}} = \frac{G_F c_1^2}{2} f_\pi (m_{D_s}^2 - m_{f_0}^2) \approx 1.50 \times 10^{-6} \text{ GeV}.$$

This value is still well within the error bars of the measured decay rate, even when a non-strange admixture of 14° – 20° in the $f_0(980)$ is allowed.

Consequently, the conclusions of the Letter remain unaltered.

References

- [1] M.D. Scadron, Phys. Rev. D 29 (1984) 1375.

[☆] PII of original article: S0370-2693(00)01264-8.

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