Errata

Erratum: Isospin violation in QCD sum rules for baryons [Phys. Rev. D 48, 2304 (1993)]

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In a recent paper [1], it was brought to our attention that some numerical factors in our equations were in error. In Eq. (3.12), the second sum rule for the nucleon, the term reading $-\frac{4}{3}a^2$ should read $-\frac{2}{3}a^2$. As a consequence, the term $\frac{8}{3}a^2$ in Eq. (3.34) is replaced by $\frac{4}{3}a^2$. There is also a change in the sum rule for the Σ hyperons. In Eq. (3.24), the factor in front of the first term (proportional to μ) on the left-hand side should read $4a^2$ rather than $\frac{16}{3}a^2$. The second term, proportional to γm_s is unchanged. These changes do not alter the results in the paper. In fact, the agreement between the solid curves in Fig. 1(a) is better, while the value of $\delta \tilde{\lambda}_N^2$ (where the two curves agree) drops to $\delta \tilde{\lambda}_N^2 = 13.5 \times 10^{-3} \text{ GeV}^2$ (a 15% change). Our final result for the isospin-beaking parameter γ is now $-3.3 \times 10^{-3} < \gamma < -1.0 \times 10^{-3}$, which agrees with our previous estimate [Eq. (4.10)] within the error bars quoted. Finally, the footnote on page 2306 should be omitted.

[1] X. Jin, M. Nielsen, and J. Pasupathy, Phys. Rev. D 51, 3688 (1995).