

Erratum: Tritium β decay in chiral effective field theory [Phys. Rev. C **94, 024003 (2016)]**

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An error in the loop function $W_3(k)$ reported in Eq. (D12) of Ref. [1] has been corrected in the Erratum [2]. The corrected expression for $W_3(k)$ in Eq. (20) of the original paper as obtained in the Erratum [2] reads

$$W_3(k) = -\frac{1}{2} \int_0^1 dz \frac{1}{M(k,z)}. \tag{20}$$

As a result of this error the following minor changes to the tritium β decay results reported in the original paper are obtained:

- (1) The values reported in the row labeled N4LO (MPE) [(next-to-next-to-next-to-next-to-leading order (multipion exchange))] of Table I of the original paper (the only ones affected by the error) change as follows:
- (2) The values in the two columns under the heading N4LO in Table II of the original paper (the only ones affected by the error) change as follows:
- (3) The values in the two columns under the heading N4LO in Table III of the original paper (the only ones affected by the error) change as follows:
- (4) Figures 4 and 5 change as follows (the vertical lines corresponding to the N4LO calculations are slightly shifted relative to the original figures):
- (5) Figure 7 changes as follows:

These changes do not affect any of the conclusions of the original paper. In particular, the results for the nd doublet scattering lengths given in the bottom left column of p. 8 of the original paper are within 0.001 fm of those listed there when the correct values of (c_D, c_E) from item (3) above are used.

TABLE I.

Λ	500 MeV	600 MeV
N4LO (MPE)	$-0.416(-0.552) \times 10^{-1}$	$-0.513(-0.730) \times 10^{-1}$

TABLE III.

Λ	N4LO	
	500	600
c_D	-1.806	-1.982
c_E	-0.542	-1.542

TABLE II.

Λ	N4LO	
	500	600
\hat{z}_0	-1.586	-0.962
\hat{d}_R	0.959	1.584
c_D	-2.150	-1.303
\hat{z}_0^*	-0.395	0.322
\hat{d}_R^*	0.682	1.400
c_D^*	-0.535	0.437

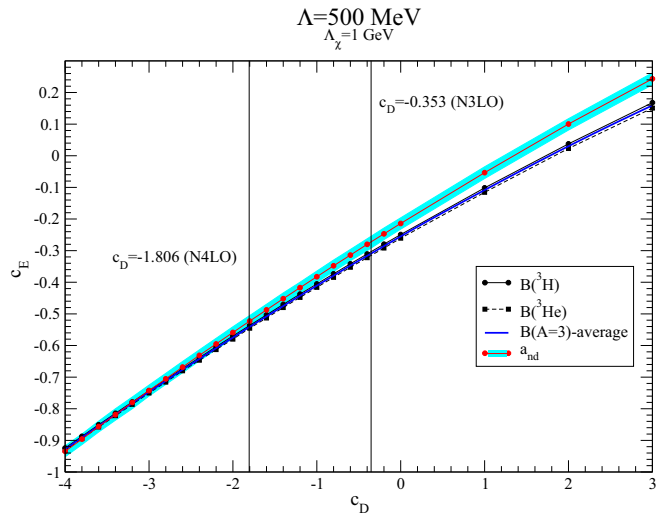


FIG. 4. The vertical line that indicates the c_D values obtained by fitting the $GT_{\text{expt.}}$ (where GT represents Gamow-Teller) retaining N4LO has been corrected.

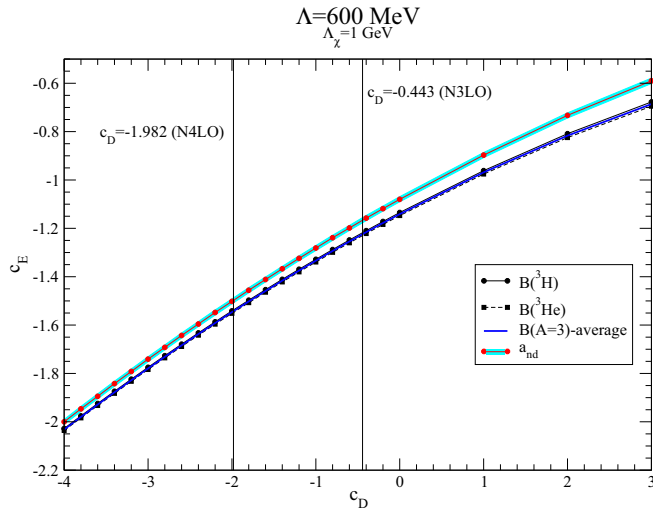


FIG. 5. The same as Fig. 4 but for $\Lambda = 600 \text{ MeV}$.

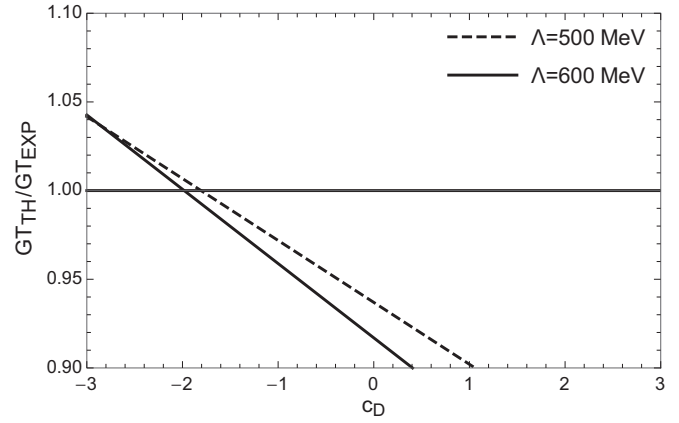


FIG. 7. The ratio $GT_{\text{th}}/GT_{\text{expt}}$ as a function of the low-energy constant c_D obtained retaining corrections up to N4LO in the axial current has been corrected for both values of the cutoff Λ .

[1] A. Baroni, L. Girlanda, S. Pastore, R. Schiavilla, and M. Viviani, *Phys. Rev. C* **93**, 015501 (2016); **93**, 049902(E) (2016).

[2] A. Baroni, L. Girlanda, S. Pastore, R. Schiavilla, and M. Viviani, preceding Erratum, *Phys. Rev. C* **95**, 059901 (2017).