



Erratum: Angular distribution of γ -rays from neutron-induced compound states of ^{140}La [Phys. Rev. C **97**, 034622 (2018)]

T. Okudaira , S. Takada, K. Hirota, A. Kimura, M. Kitaguchi, J. Koga, K. Nagamoto, T. Nakao, A. Okada, K. Sakai, H. M. Shimizu, T. Yamamoto, and T. Yoshioka

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We correct the values of the spin factor $\kappa(J)$ in our original paper. The spin factor $\kappa(J)$ was originally given by Eq. (23) in Ref. [1] as a function of the nuclear spin and the neutron partial widths defined by x and y . In the original paper, the values of x and y were obtained from the analysis result based on the formalism by Flambaum *et al.* [2]. However, due to the different order of summation of the neutron spin and neutron orbital angular momentum, the sign of y defined by Gudkov *et al.* [1] was different to that defined by Flambaum *et al.* [2]. Therefore, x and y in Eq. (22) in the original paper should be replaced with $x \rightarrow x$ and $y \rightarrow -y$, and Eq. (22) should be corrected as

$$\kappa(J) = \begin{cases} \left(1 - \frac{1}{2}\sqrt{\frac{2I-1}{I+1}\frac{y}{x}}\right) & (J = I - \frac{1}{2}) \\ \frac{I}{I+1}\left(1 + \frac{1}{2}\sqrt{\frac{2I+3}{I}\frac{y}{x}}\right) & (J = I + \frac{1}{2}) \end{cases}. \quad (22)$$

Consequently, the $\kappa(J)$ values in Eq. (23) in the original paper are corrected as

$$\kappa(J) = -3.28_{-5.58}^{+1.69}, \quad 0.56_{-0.08}^{+0.07}. \quad (23)$$

Similarly, Fig. 19 in the original paper should be replaced as Fig. 19 in this erratum. The correction to the value of $\kappa(J)$ does not affect other analyses in the original paper. The decrease in the value of $\kappa(J)$, as per Eq. (21) in the original paper, leads to a proportional reduction in the magnitude of the T -violating effect. However, since the revised $\kappa(J)$ remains on the order of 1, there is no change in the conclusion that this result suggests the T -violating effect can be enhanced to the same order as the P -violating effect. Additionally, there was a typo: a coefficient of $2/3$ should be added in Eq. (25) in the original paper like so

$$\begin{aligned} \frac{C'}{D'} &= \frac{(\bar{a}_3)_L + (\bar{a}_3)_H}{(\bar{a}_0)_L + (\bar{a}_0)_H} \\ &= \frac{2}{3}(-0.295 \cos \phi_2 \sin \phi_2 + 0.050 \sin^2 \phi_2). \end{aligned} \quad (25)$$

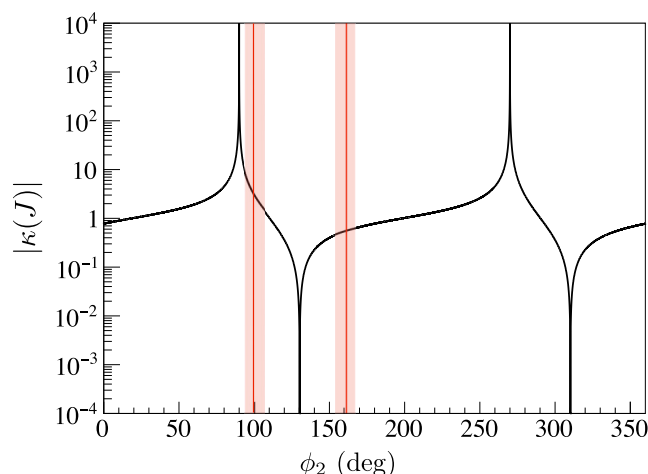


FIG. 19. Value of $|\kappa(J)|$ as a function of ϕ_2 . The solid line and shaded area show the central values of ϕ_2 and the 1σ area from central value, respectively.

This typo does not affect the results of the original paper because a_3 , the curved lines in Fig. 21, were calculated using the correct expression found in Eq. (25) of this erratum.

- [1] V. Gudkov and H. M. Shimizu, [Phys. Rev. C **97**, 065502 \(2018\)](#).
[2] V. V. Flambaum and O. P. Sushkov, [Nucl. Phys. A **435**, 352 \(1985\)](#).