

Erratum: Measurement of the $2\nu\beta\beta$ Decay Half-Life of ^{130}Te with CUORE [Phys. Rev. Lett. 126, 171801 (2021)]

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(Received 10 November 2023; published 12 December 2023)

DOI: [10.1103/PhysRevLett.131.249902](https://doi.org/10.1103/PhysRevLett.131.249902)

The Letter was published with an incorrect ^{130}Te $2\nu\beta\beta$ half-life. The value presented in the Letter is $T_{1/2}^{2\nu} = 7.71^{+0.08}_{-0.06}(\text{stat})^{+0.12}_{-0.15}(\text{syst}) \times 10^{20}$ yr and was derived by considering an effective exposure of 300.7 kg yr, which is correctly reported in the Letter. The effective exposure is the sum of the exposures of all of the channel-dataset pairs that successfully reached the end of the analysis chain and actually built up the energy spectra we fit. However, the Monte Carlo processing included efficiency terms accounting for all the collected datasets and the fraction of channels lost during the analysis. This was done to ensure a realistic description of the real collected data. Therefore, to calculate the half-life correctly, the total exposure needed to be used. The updated ^{130}Te $2\nu\beta\beta$ half-life is

$$T_{1/2}^{2\nu} = 8.76^{+0.09}_{-0.07}(\text{stat})^{+0.14}_{-0.17}(\text{syst}) \times 10^{20} \text{ yr.}$$

This result is still consistent with previous measurements and there are no implications for the Letter’s conclusions.