Erratum: Determination of antineutrino spectra from nuclear reactors [Phys. Rev. C 84, 024617 (2011)]

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Table I of the above article contains substantial errors in isospin assignments and the identification of isospin analog states. These errors are corrected and new average values are computed, which turn out to be fully consistent with the originally quoted values. Thus, the original conclusion with respect to weak magnetism is upheld.

The correct Table I is printed here. The decays of ^{58}Cu, ^{142}Pm and ^{144}Eu had the wrong isospin assignment and have been deleted. The decays of ^{32}Si,^{34}P, ^{64}Cu and ^{66}Cu had the wrong isospin analog state and no correct isospin analog states could be identified, therefore they also have been deleted. The decays of ^{20}F and ^{32}P have their isospin analog states corrected and experience a significant shift in the weak magnetism slope as a result. For the decays of the isotopes with masses $A = 6 - 18$ the numerical values have been updated, which leads to very slight shifts in their weak magnetism slope parameters. The isotopes with masses from $A = 22 - 28$ have been identified for the first time as suitable for this analysis and have been added to the table. Moreover, the units of the penultimate column were inadvertently listed in the second-to-last column.

TABLE I. Gamow-Teller decays and the associated parameters needed for a computation of the weak-magnetism slope parameter using the CVC hypothesis.

Decay			$J_i \to J_f$	E_γ (keV)	Γ_{M1} (eV)	b_γ	ft (s)	c	b_γ/Ac	$\lvert dN/dE\rvert$ (% MeV^{-1})	Ref.
^{6}He	$\to$	^{6}Li	$0^+\to1^+$	3563	8.2	71.8	805.2	2.76	4.33	0.646	[28]
^{12}B	$\to$	^{12}C	$1^+\to0^+$	15110	43.6	37.9	11640.	0.726	4.35	0.62	[38]
^{12}N	$\to$	^{12}C	$1^+\to0^+$	15110	43.6	37.9	13120.	0.684	4.62	0.6	[29]
^{18}Ne	$\to$	^{18}F	$0^+\to1^+$	1042	0.258	242.	1233.	2.23	6.02	0.8	[30]
^{20}F	$\to$	^{20}Ne	$2^+\to2^+$	8640	4.26	45.7	93260.	0.257	8.9	1.23	[31]
^{22}Mg	$\to$	^{22}Na	$0^+\to1^+$	74	0.0000233	148.	4365.	1.19	5.67	0.757	[55]
^{24}Al	$\to$	^{24}Mg	$4^+\to4^+$	1077	0.046	129.	8511.	0.85	6.35	0.85	[56]
^{26}Si	$\to$	^{26}Al	$0^+\to1^+$	829	0.018	130.	3548.	1.32	3.79	0.503	[32]
^{28}Al	$\to$	^{28}Si	$3^+\to2^+$	7537	0.3	20.8	73280.	0.29	2.57	0.362	[57]
^{28}P	$\to$	^{28}Si	$3^+\to2^+$	7537	0.3	20.8	70790.	0.295	2.53	0.331	[57]
^{14}C	$\to$	^{14}N	$0^+\to1^+$	2313	0.0067	9.16	1.096×10^{9}	0.00237	276.	37.6	[38]
^{14}O	$\to$	^{14}N	$0^+\to1^+$	2313	0.0067	9.16	1.901×10^{7}	0.018	36.4	4.92	[26]
^{32}P	$\to$	^{32}S	$1^+\to0^+$	7002	0.3	26.6	7.943×10^{7}	0.00879	94.4	12.9	[39]

As a result the averages and mean for the weak magnetism slope parameter also change. For the case where we restrict the sample to nuclei with $\log ft < 6$, we obtain

$$\frac{dN}{dE} = (0.67 \pm 0.26)\,\%\,\mathrm{MeV}^{-1}\,, \tag{1}$$

which is consistent within one standard deviation with value previously quoted in Eq. 18. Because the standard value $dN/dE = 0.5\,\%\,\mathrm{MeV}^{-1}$ of Ref. [24] was used for the evaluations in the paper and the purpose of Eq. 18 was illustrative only, this change has no impact on any other section. For the case where we include all nuclei the average and standard deviation are given by

$$\frac{dN}{dE} = (4.78 \pm 10.5)\,\%\,\mathrm{MeV}^{-1}\,, \tag{2}$$

which supersedes the result in Eq. 19. The quantitative change is very small and again these numbers are given only for illustration.

Therefore, none of results are affected and thus the conclusions of the article are unchanged.

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