Erratum

Erratum! Polarized electron-nucleus scattering and parity-violating neutral-current interactions [Phys. Rev. D 12, 3575 (1975)]

G. Feinberg

The first line of Eq. (2.2) should read

 $\epsilon_{e_1}^{VA} = \pi \alpha (1 - 4 \sin^2 \theta_w), \quad \epsilon_{e_2}^{VA} = -\pi \alpha (1 - 4 \sin^2 \theta_w)$

instead of

$$\epsilon_{1e}^{VA} = \pi \alpha (1 - 4 \sin^2 \theta_W), \quad \epsilon_{e_2}^{VA} = \pi \alpha (1 - 4 \sin^2 \theta_W).$$

The first line of Eq. (4.13) should read

$$R(0^+ \rightarrow 0^-) \simeq \frac{G_F}{\pi \alpha^3} \frac{\epsilon_{e_1}^{VA} \pm \epsilon_{e_2}^{VA}}{\sqrt{2r_n^2}}$$

instead of

$$R(0^+ \to 0^-) \simeq \frac{G_F}{\pi \alpha^3} \frac{\epsilon_{e_1}^{VA} \pm \epsilon_{e_1}^{VA}}{\sqrt{2}r_{*}^{2}}.$$

An accurate calculation of $M_{2\gamma}$ for a $0^+ \rightarrow 0^-$ transition in O^{16} has been published by E. Borie and D. Drechsel, Phys. Rev. Lett. 26, 195 (1971). They obtain a cross section which is approximately equal to that given in Eq. (4.14) for $p \sim 200$ MeV and somewhat smaller than Eq. (4.14) for higher p. The qualitative results presented in my paper concerning the use of $0^+ \rightarrow 0^-$ transitions to detect parity-violating neutral currents are unaffected by the use of this more accurate calculation. I thank Dr. E. Borie for calling this work to my attention.