

Errata

Question of Parity Conservation in Weak Interactions, T. D. LEE AND C. N. YANG [Phys. Rev. **104**, 254 (1956)]. Equation (A.4) in the Appendix of this paper should be amended to read as follows:

$$\begin{aligned} a\xi = & -(|C_S|^2 - |C_V|^2 + |C_S'|^2 - |C_V'|^2) |M_F|^2 \\ & + \frac{1}{3}(|C_T|^2 - |C_A|^2 + |C_T'|^2 - |C_A'|^2) |M_{G.T.}|^2 \\ & + 2 \operatorname{Re} \left\{ i \frac{Ze^2}{\hbar c p} [(C_S C_V^* + C_S' C_V'^*) |M_F|^2 \right. \\ & \left. - \frac{1}{3}(C_T C_A^* + C_T' C_A'^*) |M_{G.T.}|^2] \right\}. \quad (\text{A.4}) \end{aligned}$$

This change does not affect the text of the paper, nor does it affect the other parts of the Appendix.

The authors are indebted to Dr. R. B. Curtis and to Dr. M. Morita¹ for pointing out to them the error in the original Eq. (A.4).

¹ M. Morita, Progr. Theoret. Phys. Japan **10**, 364 (1953).

Separation of the Cross Section for Scattering of Photons by Protons into Spin-Flip and Non-Spin-Flip Parts, R. GOMEZ AND D. WALECKA [Phys. Rev. **104**, 1479 (1956)]. In Appendix 1, both amplitudes should start with $[(E+\mu)/2E]^{\frac{1}{2}}$ instead of $(E+\mu)/2E$, and a missing exponent $\frac{1}{2}$ should be inserted in the second $[(E-\mu)/(E+\mu)]^{\frac{1}{2}}$ of the equation for A_3 . In Appendix 2, δ should be replaced by 8 in the equation for e .

Theory of Hyperfine Structure, CHARLES SCHWARTZ [Phys. Rev. **105**, 173 (1957)]. The definition of the Dirac quantum number κ following Eq. (64) should read $\kappa = (j-l)(2j+1)$.

Separable Nonlocal Potential and Nuclear Saturation, M. K. SUNDARESAN [Phys. Rev. **105**, 1075 (1957)]. It has been kindly pointed out by Dr. C. T. DeDominicis that a normalization factor $4\pi^3$ is missing from the expressions for the potential energy. When included, these expressions yield a binding energy of the order of 20 Mev per particle. The note added in proof is incorrect.

Lifetimes of τ , $K_{\mu 3}$, and K_e Decay Modes, T. F. HOANG, M. F. KAPLON, AND G. YEKUTIELI [Phys. Rev. **105**, 278 (1957)]. In a recent paper on the

lifetimes of K^+ mesons we have utilized a method of lifetime estimation by a comparison of the ratios of various types of K^+ mesons in two emulsion stacks separated by a distance Δx . The errors quoted on the lifetimes in the paper are quite grossly underestimated and the error was detected at too late a date for correction in final proof. The errors quoted in the paper arose from an attempt to take into account (incorrectly) the condition $\sum_i f(K_i^+) = 1$, where $f(K_i^+)$ is the fraction of K^+ mesons of type i . The actual results with the errors properly taken into account lead to the conclusion that from this particular analysis of the experimental data no upper limit can be placed on the individual lifetimes, but a lower limit does exist of about 0.5×10^{-8} sec for each type of K^+ meson. The limit of resolution of this type of experiment as concerns the setting of an upper limit on the lifetime is characterized by the magnitude of the quantity $(\Delta x/cT_0)(mc/P)$; the larger this quantity is for given statistics, the greater the possibility of setting a finite upper limit on the lifetime. A more exact statement is that

$$(p_a/p_b)_{\min} > \exp \left[-\frac{\Delta x}{cT_0} \left(\frac{mc}{P} \right) \right],$$

where by $(p_a/p_b)_{\min}$ we mean the lower bound statistically for this ratio. Since in our experiment $\exp[-(\Delta x/cT_0)(mc/P)] = 0.711$, any ratio $p_a/p_b \leq 0.711$ corresponds to an infinite lifetime; because of statistical fluctuations all of our ratios encompass this value and the lack of an upper bound results. The statement of the upper limit as infinite is only mathematical and is certainly nonphysical. The observations of decays in flight of K^+ mesons in these emulsions set a physical upper limit of 5×10^{-8} second. The conclusions of the paper are not appreciably affected by the foregoing comments.

We wish to thank Mr. A. Connolly of Cornell University and Mr. S. Taylor of Columbia University who communicated with us concerning this error.

Transport Equation in Quantum Statistics for Spinless Molecules, A. W. SÁENZ [Phys. Rev. **105**, 546 (1957)]. On page 546, the comma in the first line of the abstract should be suppressed. On page 547, Eq. (2.1) contains the following errors: "here" should be replaced by "where"; $u(\mathbf{q}_1)$ by $u(\mathbf{q}_i)$; and the sign = in the third Eq. (2.1) by \equiv . On the line following (2.1), $_{1}\mathbf{q}$ should read \mathbf{q}_1 . On page 548, an extra term $g^{(2)}$ should be added to the right-hand side of (2.7). On page 552, in the