

# Errata

**Threshold Electrodisintegration of the Deuteron,** RONALD J. ADLER [Phys. Rev. 169, 1192 (1968)]. An error was made in the sum over spins leading to (4.15). The form factors  $G_1$  and  $G_2$ , instead of being incoherent, are coherent. As a result  $G_1^2 + G_2^2$  should be replaced by  $(G_1 + G_2)^2$  in Eqs. (4.15), (4.19), and (7.13). The conclusions in Sec. 8, which are only roughly quantitative, are essentially unchanged.

One further conclusion to be added is: (6) The impulse approximation and the  $(\pi\pi)$  current correction to the cross section do not involve the  $D$  state.

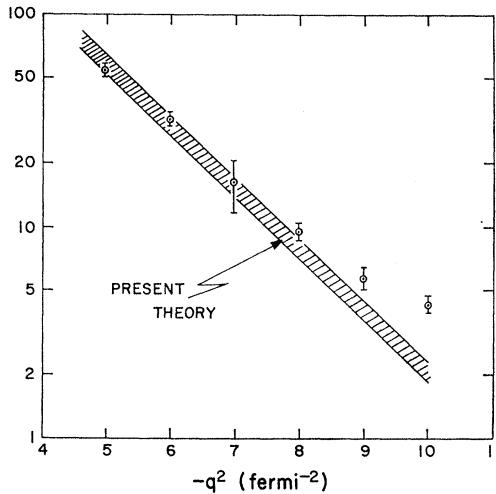


FIG. 9. Modified version. Inelastic  $e$ -D scattering cross section for the "shoulder" portion of cross-section curve. Units are  $10^{-36}$  cm<sup>2</sup>/sr (MeV/c).

Lastly, Fig. 9 must be modified, since the theoretical values do increase somewhat, and are in agreement with experiment for  $q^2 \lesssim 8$  F<sup>-2</sup>. We have indicated on the modified figure what we believe is the maximum uncertainty due to spread in the  $(np)$  c.m. energy.

**Existence Proof by a Fixed-Point Theorem for Solutions of the Low Equation,** ROBERT L. WARNOCK [Phys. Rev. 170, 1323 (1968)].

(1) Replace the theorem in the paragraph following Eq. (2.10) with the following: Equation (2.10) is studied with the aid of Schauder's fixed-point theorem<sup>1</sup>: *In a normed linear space let  $K$  be a convex closed set and  $A$  a continuous operator such that  $A(K) \subset K$  and  $A(K)$  is compact. Then  $A$  has a fixed point  $\phi$  in  $K$ .* (The previous statement of this theorem, copied from Ref. 1, was incorrect. It is

contradicted by the trivial example where  $K$  is the real line and  $A$  is the translation operator  $x \rightarrow x+a$ . I wish to thank Dr. Henri Epstein for pointing out the error.)

(2) Add a note to item (v) following the theorem: Note that what we call a compact set is sometimes called a relatively compact set.

(3) Add a note to Sec. III: To avoid misunderstanding in a comparison of this paper with that of Lovelace (Ref. 14c), it should be pointed out that the Low operator is not compact acting on the entire normed linear space. It is compact on the subset  $K$  defined in Eq. (2.12). If it were compact on the whole space, then its Fréchet derivative would be compact on the whole space; cf. Ref. 2, p. 135. The derivative, being linear, would then be a Fredholm operator. The Fréchet derivative of the Low operator is a Cauchy singular integral operator, which certainly does not have the Fredholm properties. Its index is nonzero, in general.

**Radiative Corrections to  $K_{e3}^0$  Decays and the  $\Delta I = \frac{1}{2}$  Rule,** EDWARD S. GINSBERG\* [Phys. Rev. 171, 1675 (1968)]. The first line of Eq. (10) should read

$$\text{Re}(t_1) = \frac{a}{2\Delta} \left[ \frac{4}{3}\pi^2 + 2 \text{Li}_2 \left( \frac{a+2m_\pi^2-\Delta}{a+2m_\pi^2+\Delta} \right) + \dots \right]$$

For completeness we note that

$$\text{Im}(t_1) = -\frac{\pi a}{\Delta} \left( 1 + \ln \frac{\lambda^2 \hbar^2}{\Delta^2} \right)$$

In Eq. (26) the first line in the equation for  $T_0$

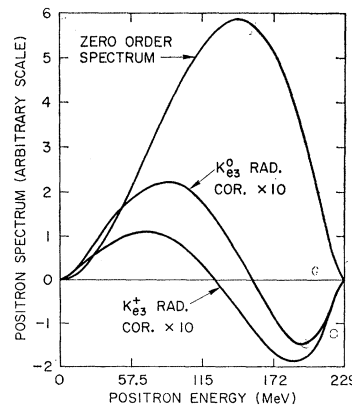


FIG. 5. Corrected version.

\* Supported by the National Science Foundation.

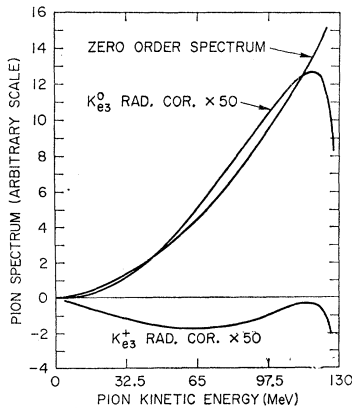


FIG. 6. Corrected version.

must be corrected to

$$T_0 = \frac{3}{2} \ln(\Delta/m) + \pi^2 - \dots$$

The  $\pi^2$  term derives from the static Coulomb part of the electromagnetic final-state interaction [Fig. 1(b)] and has the characteristic form  $\pi\alpha/v$ , where  $v$  is the relative speed of the two interacting particles

( $v = \Delta/a$  in the notation of the paper). Equations (34) and (38) should read

$$(\Delta\tau/\tau)_{K_{e3}^0} = -\Gamma_{RC}/\Gamma_0 \approx -1.9\%$$

and

$$\delta = \left(\frac{\Delta\tau}{\tau}\right)_{K_{e3}^+} - \left(\frac{\Delta\tau}{\tau}\right)_{K_{e3}^0} \approx 2.4\%,$$

respectively. The value of  $\delta$  should also be changed in the last line of the abstract. The numerical results in Figs. 2-4 should be altered by adding approximately 1.15% to the radiative corrections. In Figs. 5 and 6 one should add 1.15% of the zero-order spectrum to the  $K_{e3}^0$  radiative correction. The corrected Figs. 5 and 6 are given below. It is seen that the difference between the  $K_{e3}^0$  and the  $K_{e3}^+$  radiative corrections is mainly due to the Coulomb correction (in fact  $\pi\alpha/v = 2.3\%$  for  $v=1$ ). I am indebted to Professor S. M. Berman for suggesting the importance of the Coulomb correction in this context.