ERRATA

CURRENT COMMUTATOR CALCULATION OF THE K_{l4} FORM FACTORS. Steven Weinberg [Phys. Rev. Letters 17, 336 (1966)].

A mistake was made in the numerical value used for the pion decay amplitude F_π. If F_π is calculated from the Goldberger-Treiman relation [with $g_A/g_V=1.18$ and $G^2/4\pi=14.6$] and we use $2f_+=0.32\pm0.01$, then the constant A appearing in the K_{e4} form factors takes the value $|A|=0.97\pm0.03$ instead of 1.20 ± 0.07. Our prediction for the form factors in the decay $K^+\to\pi^++\pi^-+e^++\nu$ was $F_1=F_2=A$, while the experimental values quoted in the Letter were $F_1/F_2=0.8\pm0.3$ and $|F_1|=1.2\pm0.1$. Thus the agreement between theory and these experiments is still impressive (though not quite so spectacular as previously thought), and it still provides powerful evidence against a strong low-energy π-π interaction. Meanwhile, some groups have reported variations in the K_{e3} form factor f_+ which could change the predicted value of F_1 by as much as 10 or 20%, probably in an upward direction. (N. Cabibbo, private communication.)

Equation (13) of the Letter, which was atributed solely to C. G. Callen and S. B. Treiman, Phys. Rev. Letters 16, 153 (1966), was derived simultaneously by V. S. Mathur, S. Okubo, and L. K. Pandit, Phys. Rev. Letters 16, 371 (1966).

The rate predicted in Eq. (25) should be divided by a factor of 2 for the decay $K^+\to 2\pi^0+e^++\nu$, because of the identity of the π^0's. Thus our prediction in Eq. (27) of the branching ratio of this decay to $K^+\to\pi^++\pi^-+e^++\nu$ should be revised to 0.42. I am very grateful to C. Kacser for calling my attention to this error.

ANALYTIC POWER SERIES SOLUTION OF THE SCHRÖDINGER EQUATION FOR THE HELIUM ATOM and INTEGRAL SERIES SOLUTION OF THE SCHRÖDINGER EQUATION. W. Byers Brown and R. J. White [Phys. Rev. Letters 18, 1037, 1039 (1967)].

The analytic solutions proposed in our Letters can be expanded as power series $x^{1/2}=(r_1{}^2+r_2{}^2)^{1/2}$. Some years ago Bartlett[1] and more recently Fock[2] proved that solutions of this form do not exist, because they fail to satisfy the boundary conditions required of functions belonging to the domain in which the Hamiltonian $\mathcal{H}$ is self-adjoint. The error in our treatment, which led to us the conclusion that $\varphi_0=\psi_0$, was to apply Kato's theorem[3] to a function not belonging to the domain of $\mathcal{H}$.

The form for ψ proposed by Fock[2] can be expressed as a power series[4] in r_{12}, as in Eq. (6) of our first Letter. To complete our treatment we have therefore to determine $\varphi_0(r_1,r_2)$ so that ψ satisfies the proper boundary conditions. The work of Bartlett[1] and Fock[2] shows that the correct φ_0 contains terms logarithmic in x.

[1]J. H. Bartlett, Phys. Rev. 51, 661 (1937).
[2]V. A. Fock, Izv. Akad. Nauk SSSR, Ser. Fiz. 18, 161 (1954).
[3]T. Kato, Trans. Am. Math. Soc. 70, 196 (1951).
[4]A. M. Ermolaev and G. B. Sochilin, Dokl. Akad. Nauk SSSR 155, 1050 (1964) [translation: Soviet Phys.-Doklady 9, 292 (1964)].