Errata

Emission of Photoneutrinos and Pair Annihilation Neutrinos from Stars, HONG-YEE CHIU AND ROBERT C. STABLER [Phys. Rev. **122**, 1317 (1961)]. In this paper Eq. (10) should read

$$\sigma v=\frac{2\pi}{(2E)(2q)}\int|M|^2\frac{1}{(2\pi)^6}\delta^4(P+q-P'-P_\alpha-P_\beta)\times\frac{d^3P_\alpha}{2E_\alpha}\frac{d^3P_\beta}{2E_\beta}\frac{d^3P'}{2E'}. \quad (10)$$

In the original paper the variable "v" is missing from the left-hand side of Eq. (10).

Ritus[1] has pointed out that in our formalism the electromagnetic coupling constant $e^2/(\hbar c)=1/137$ is mistakenly divided by a factor of 4π. In order to restore our results to the correct value, a factor of 4π must be multiplied to all equations containing the fine structure constant $e^2/(\hbar c)$. The rate of energy loss computed in our paper for the photoneutrino process is therefore too small by a factor of 4π.

Our calculation on the energy-loss rate by pair annihilation process[2] is unaffected by the above correction.

[1] V. I. Ritus, Zh. Eksperium. i Teor. Fiz. **41**, 1285 (1961) [translation: Soviet Phys.—JETP **14**, 915 (1961)].
[2] H. Y. Chiu and P. Morrison, Phys. Rev. Letters **5**, 573 (1960); H. Y. Chiu, Phys. Rev. **123**, 1040 (1961).

Energy Bands in Lithium, JOSEPH CALLAWAY [Phys. Rev. **124**, 1824 (1961)]. The coefficient $E_6^{(2)}$ given in Table IV is in error. The correct value should be 0.128 (instead of 0.537). The corrected value of the Fermi energy is $E_F=0.427$ Ry so that the width of the occupied portion of the band is 3.47 eV. I am indebted to A. J. Hughes for discovering this error.

Electron Spin Resonance of Hydrogen Atoms in CaF_2, J. L. HALL AND R. T. SCHUMACHER [Phys. Rev. **127**, 1892 (1962)]. The calculation of the angular average of the second-order correction to the position of the $M=0$ lines described in the second paragraph on p. 1902 is incorrect. The fourth line of that paragraph also contains a misprint. The equation in that line should read

$$\tfrac{1}{2}T_\perp^2[T_{11}^2/\Delta^2+1]/h\nu=4(A_1^2+A_3^2)/h\nu.$$

The correct number of lines for the $M=0$ transition is sixteen, since there are four *distinct* fluorine pairs surrounding a hydrogen atom. The angular average of the center of gravity for these sixteen lines is just

$$\frac{E_2}{h}=\frac{T_\perp^2}{h^2\nu}\left\langle\frac{T_{11}^2}{\Delta^2}+1\right\rangle_{\rm av}=4.2T_\perp^2/h^2\nu.$$

We are indebted to Dr. Maurice Goldman, of the Centre d'Etudes Nucléaires de Saclay, for calling this error to our attention and providing the correct solution.

By accident, this correction has no effect on the results of our paper, since in an earlier version of the manuscript the correct result for E_2 had been obtained by an incorrect argument. Through an oversight the results quoted in the final manuscript used this correct value of E_2.

Wave Distortion for Magnetic Moment Effects in Nucleon-Nucleon Scattering, G. BREIT AND H. M. RUPPEL [Phys. Rev. **127**, 2123 (1962)]. It has been kindly pointed out to the writers by Dr. John K. Perring that the combination $1/\mathbf{s}^2-1/\mathbf{c}^2$ in Eqs. (1.8) and (3.3) should be $1/\mathbf{s}^2+1/\mathbf{c}^2$ and that in Eq. (2.2) the $-$ sign between the two members inside the square brackets should be $+$. This implies also a change from $-$ to $+$ between the two parts of the expression in (1.9). The sentence immediately preceding the first new paragraph on p. 2126 incorrectly states that the vector product is unchanged while actually its sign changes, in agreement with the other corrections. The numerical results stated in the paper are affected only slightly. In Table IV for $\theta=5°$ the only change is from 0.0328 to 0.0323 in the fourth column. The corrected numbers for other values of θ are for 10°, 0.0205, 0.0021, 0.0087, 0.0138; for 20°, 0.0061, 0.0020, −0.0104, 0.0099; for 30°, 0.0001, 0.0000, −0.0003, 0.0003. These numbers are in the same order as in the table.

Referring to the bottom of p. 2130 and the top of p. 2131 the recalculated increases of C_{KP} in p-p scattering at 147 MeV, $\theta=10°$, 20°, and 30° are, respectively, 0.020, 0.100, and 0.000 and the changes in YLAM values of P, R, A, and D caused by spin-spin effects are, respectively,

−0.00012	0.00105	−0.00024	−0.00001	at $\theta=30°$,
−0.00012	0.00138	−0.00027	0.00001	at $\theta=20°$,
−0.00005	0.00040	−0.00016	0.00006	at $\theta=10°$,
0.00000	−0.00021	0.00000	0.00000	at $\theta=5°$.

The published values of the changes as well as those above are much too small to affect the interpretation of experiments. The numbers listed after Table IV for the effect of inclusion of $\exp(-i\eta\ln\mathbf{s}^2)$ on $P(\theta)$ are practically unaffected, the only changes being from 0.0037 to 0.0036 at 147 MeV, $\theta=5°$ and from 0.0007 to 0.0008 at 210 MeV, $\theta=15°$.

The change in the part of Fig. 1 showing comparison with experiment would be barely visible in

the printed reproduction and is much smaller than the experimental uncertainties. The changes would be visible for the lower part of Fig. 1. The corrected full curve above that for YLAM is practically indistinguishable from the latter between 30° and 35°. Between 15° and 25° the full curve is too high by about 0.002 and at 30° by about 0.001(5). The inadvertent omission of reference to previous work on magnetic moment effects by Ohnuma[1] is acknowledged with apologies.

[1] Shoroku Ohnuma, Phys. Rev. **108**, 460 (1957). The calculations in this reference do not take into account wave distortion.

Low-Energy Nuclear Level Scheme of Rh^{104}, R. C. GREENWOOD [Phys. Rev. **129**, 345 (1963)]. The gamma-ray yield of the $B^{10}(n,\alpha)Li^7$ reaction was incorrectly given as 89.7% as well as being incorrectly referenced. The last sentence on p. 347 should therefore read: "In this boron spectrum, the 478-keV gamma rays are produced in 93.5% of all the resulting $B^{10}(n,\alpha)Li^7$ reactions,[9]" with Ref. 9 corrected to read: J. A. DeJuren and H. Rosenwasser, Phys. Rev. **93**, 831 (1954).

Influence of a Combined Magnetic Dipole and Electric Quadrupole Interaction on Angular Correlations, KURT ALDER, ECKART MATTHIAS, WERNER SCHNEIDER, AND ROLF M. STEFFEN [Phys. Rev. **129**, 1199 (1963)]. Our expression for the anisotropy A [Eq. (57)] should be replaced by

$$A=[60A_{22}a_{22}^{(2)}-30\sqrt{3}(A_{24}+A_{42})a_{24}^{(2)}+45A_{44}a_{44}^{(2)}]$$
$$\times\Big[16(2I+1)+10A_{22}(a_{22}^{(0)}-3a_{22}^{(2)})$$
$$+\tfrac{9}{2}A_{44}\Big(\frac{9}{4}a_{44}^{(0)}-5a_{44}^{(2)}+\frac{35}{4}a_{44}^{(4)}\Big)$$
$$-\tfrac{3}{2}(A_{24}+A_{42})(3(5)^{1/2}a_{24}^{0}-10\sqrt{3}a_{24}^{(2)})\Big]^{-1}.$$

Therefore, Figs. 18 and 19 have to be disregarded and replaced by the following figures:

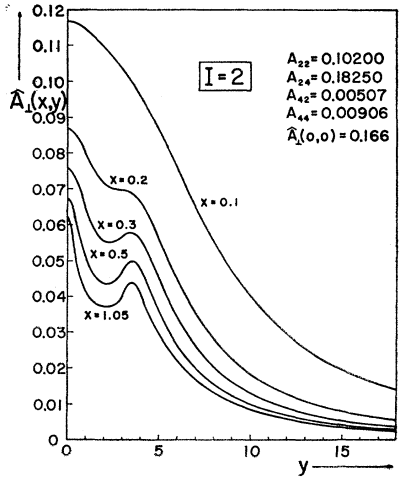

FIG. 18. The anisotropy $\hat{A}_\perp=[W(\pi)-W(\frac{1}{2}\pi)]/W(\frac{1}{2}\pi)$ of the integral angular correlation with magnetic field perpendicular to detector plane for $I=2$.

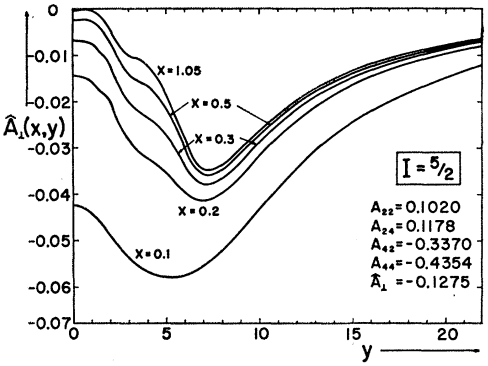

FIG. 19. The anisotropy $\hat{A}_\perp=[W(\pi)-W(\frac{1}{2}\pi)]/W(\frac{1}{2}\pi)$ of the integral angular correlation with magnetic field perpendicular to detector plane for $I=\frac{5}{2}$.

In addition, Eq. (61) should read

$$W(\theta)=\sum_{k_1k_2}A_{k_1}(R_1)A_{k_2}(R_2)$$
$$\times[(2k_1+1)(2k_2+1)]^{1/2}a_{k_1k_2}{}^{0}P_k(\cos\theta),$$

where $k=k_1$ if $\theta_1=\theta$, and $k=k_2$ if $\theta_2=\theta$. In the following two sentences $a_{kk}{}^0$ and $a_{kk}{}^0$ should be replaced by $a_{k_1k_2}{}^0$ and $a_{k_1k_2}{}^0$, respectively.

Angular Correlation Perturbed by an Anisotropic Hyperfine Interaction. H. J. LEISI AND R. T. DECK [Phys. Rev. **129**, 2117 (1963)]. In the final version of the manuscript a factor $1/(4\pi)^{1/2}$ was omitted from Eqs. (31) and (32). These equations should read

$$Y_k{}^{\mu}(\theta,\phi)=\frac{a_k{}^{\mu}(\theta)}{(4\pi)^{1/2}}e^{i\mu\phi}, \tag{31}$$

$$Y_k{}^{\mu}(0,\phi)=\frac{a_k{}^{\mu}(0)}{(4\pi)^{1/2}}e^{i\mu\phi}=\Big(\frac{2k+1}{4\pi}\Big)^{1/2}\delta_{\mu 0}. \tag{32}$$

No figures or other formulas are affected by the correction. In the last sentence of Sec. VI the phrase "parallel to the detector plane" should read "perpendicular to the detector plane."

Properties and Effects of η Decays. RIAZUDDIN AND FAYYAZUDDIN [Phys. Rev. **129**, 2337 (1963)]. Due to use of a normalization different from that of Chew, the value of $\lambda/4\pi=-0.15$ used in the text should be replaced by $\lambda/16\pi=-0.15$. Then Eqs. (9) and (10) of the text, respectively, become

$$\Gamma_\eta(\pi^+\pi^-\pi^0)\approx 224\text{ eV}, \tag{9}$$

$$\Gamma_\eta(3\pi^0)\approx 358\text{ eV}. \tag{10}$$

The conclusions after Eq. (11) in the first and second paragraphs should read as follows: "Combining the estimate of Hori *et al.* for $\Gamma_\eta(2\gamma)$ or the estimate $\Gamma_\eta(2\gamma)\approx 192$ eV with our estimates (9) and (10) for $\Gamma_\eta(\pi^+\pi^-\pi^0)$ and $\Gamma_\eta(3\pi^0)$, we find $\Gamma_\eta(2\gamma)$ different from $\Gamma_\eta(3\pi^0)$ and $r=\Gamma_\eta(\text{neutrals})/\Gamma_\eta(\pi^+\pi^-\pi^0)\approx 2.4$