

factors, $F_{\pm}(q_{\pm}^2)$, determine the decay matrix element $M \sim F_{+}(q_{+}^2)(q_{+})_{\lambda} + F_{-}(q_{-}^2)(q_{-})_{\lambda}$ with $(q_{\pm})_{\lambda} \equiv (p_K \pm p_{\pi})_{\lambda}$. This experimental value for ξ is inconsistent with a "G-T type" prediction for ξ , viz.: $\xi \cong (m_K^2 - m_{\pi}^2)/m_K^{*2} = 0.3$ or $\xi \cong (m_K^2 - m_{\pi}^2)/(m_K^{*2} + m_K^2 - m_{\pi}^2) = 0.2$ for spins of 0 or 1, respectively, associated with the assumed dominant K^* pole. [See, in connection with the spin 0 case, the work of J. Bernstein and S. Weinberg, Phys. Rev. Letters 5, 481 (1960), whose argument we have generalized a little; the spin 1 case is treated analogously.]

⁷M. Gell-Mann and F. Zachariasen, Phys. Rev. 123, 1065 (1961).

⁸S. Bergia, A. Stanghellini, S. Fubini, and C. Villi, Phys. Rev. Letters 6, 367 (1961). Physically, $c_{\rho}(n, p)$, $c_{\delta}(n, p)$ are analogous in significance to $c_{\pi}(n, p)$, $c_{\beta}(n, p)$, $c_{\alpha}(n, p)$.

⁹F. Bumiller, M. Croissiaux, E. Dally, and R. Hof-

stadter, Phys. Rev. 124, 1623 (1961); R. Hofstadter, C. deVries, and R. Herman, Phys. Rev. Letters 6, 790 (1961); R. M. Littauer, H. F. Schopper, and R. R. Wilson, Phys. Rev. Letters 7, 141 (1961).

¹⁰Negative values for $[F_V^{(\infty)}]_{np}$ are ruled out by the fact that $[F_V^{(\infty)}]_{np} = Z_1 V = Z_2$ with $0 \leq Z_2 < 1$, where $(Z_1 V)^{-1}$ is the renormalization factor for the nucleon weak polar vector or electromagnetic isovector vertex γ_{λ} and Z_2 is the nucleon propagator renormalization factor. The first equality follows from arguments of G. Källén [Handbuch der Physik, edited by S. Flügge (Springer-Verlag, Berlin, 1958), Vol. 5, Part 1, pp. 358-363]; the second equality is an immediate consequence of Ward's identity; the limits on Z_2 are due to H. Lehmann [Nuovo cimento 11, 342 (1954)].

¹¹We understand that some very preliminary data may indicate the existence of a resonant four-pion state with mass = 1.04 Bev = 7.4 m_{π} .

E R R A T A

NEUTRAL DECAY MODES AND THE SPIN AND PARITY OF THE η MESON. Laurie M. Brown and Paul Singer [Phys. Rev. Letters 8, 155 (1962)].

In describing our calculation of the $\pi^0 + \gamma$ decay of a vector meson, we remarked that an omitted diagram in which a photon emerges directly from the decay vertex together with a π^0 and a closed pion loop gives formally a quadratic divergence. However, closer examination shows that this term actually vanishes by symmetry after integration over the pion loop momentum. Thus in the approximation used, that of a structureless three-pion vertex of the type

$$V_{\mu} \epsilon^{\mu\nu\sigma\rho} p_{\nu}^{(+)} p_{\sigma}^{(-)} p_{\rho}^{(0)},$$

with photon interactions generated by gauge invariance, there is no ambiguity in our calculation as presented in the Letter. This remark explains also the gauge invariance of our result as presented previously, and, of course, strengthens our conclusion that the spin, parity, and G-

parity assignment 0^{-+} is theoretically favored for the η meson, in agreement with recent experimental observations of the Berkeley group.

INTRINSIC STRUCTURE AND LOW-ENERGY $\pi\pi$ SCATTERING IN $K^{\pm} \rightarrow 3\pi$ DECAY. G. Barton and C. Kacser [Phys. Rev. Letters 8, 226 (1962)].

Due to two algebraic errors the integral $F_{1,1}$ and the quadratic coefficients were given incorrectly. The correct equations are:

$$F_{1,1} = \frac{a_1}{2\pi} \left\{ \frac{2-k^2}{2\omega^4} + \frac{3k}{2\omega^5} \ln(\omega-k) \right\} = 0.0445 a_1,$$

$$C_1 = (16 \epsilon^2) [J_2 + H_1] = [0.23 a_2 + 0.039 a_1],$$

$$C_1' = (32 \epsilon^2/3) [J_0 - J_2 - 3H_1]$$

$$= [0.093 a_0 - 0.16 a_2 - 0.078 a_1],$$

$$C_2 = (2\epsilon^2/3) [2J_0 + J_2 - 3H_1]$$

$$= [0.012 a_0 + 0.0097 a_2 - 0.0049 a_1],$$

$$C_2' = (4\epsilon^2) [J_2 + H_1] = [0.058 a_2 + 0.0098 a_1].$$