

ERRATA

STUDY OF $\gamma p \rightarrow p\omega$ WITH LINEARLY POLARIZED PHOTONS AT 2.8 AND 4.7 GeV. J. Ballam, G. B. Chadwick, R. Gearhart, Z. G. T. Guiragossian, M. Menke, J. J. Murray, P. Seyboth, A. Shapira, C. K. Sinclair, I. O. Skillicorn, G. Wolf, R. H. Milburn, H. H. Bingham, W. B. Fretter, K. C. Moffeit, W. J. Podolsky, M. S. Rabin, A. H. Rosenfeld, and R. Windmolders [Phys. Rev. Lett. 24, 1364 (1970)].

In Fig. 4 the vertical scales for the density matrix elements ρ_{00}^0 , $\text{Re}\rho_{10}^0$, and ρ_{1-1}^0 are incorrectly labeled. Change 0.4 to 0.2 and -0.4 to -0.2 . Other density matrix elements and $P\sigma$ are correctly labeled.

FIRST PHASE-BAND DESCRIPTION: $\pi^+ - p$ SCATTERING AT 2.50 AND 2.75 BeV/c. David Bridges, Michael J. Moravcsik, and Akihiko Yokosawa [Phys. Rev. Lett. 25, 770 (1970)].

In Fig. 1 of the original paper, the results of Ref. 7 of that paper¹ were plotted incorrectly. The correct results are given here in Figs. 1

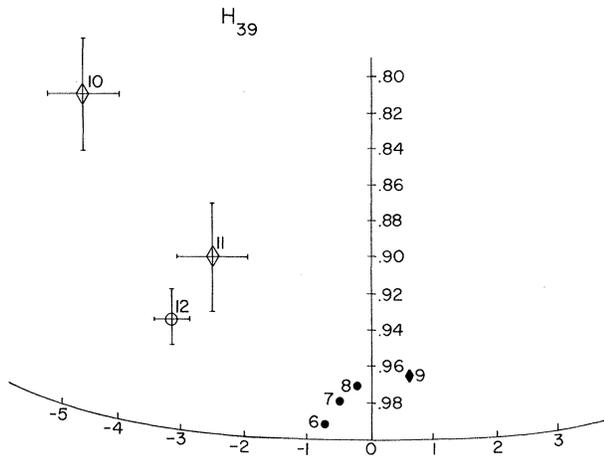


FIG. 1. Comparison of the H_{39} parameters. The figure shows only a small segment of the Argand circle, as explained in Fig. 3. The numbers along the circle indicate values of δ (not 2δ), and the numbers along the vertical line are values of η (not $\frac{1}{2}\eta$). The points labeled 6, 7, 8, and 9 are the results of Ref. 1 at laboratory kinetic energies of 1.6259, 1.7456, 1.8753, and 1.9351 BeV, respectively. The points labeled 10 and 11 are our results at 2.363 and 2.613 BeV (momenta of 2.5 and 2.75 BeV/c), respectively. Finally, the point labeled 12 is the result of Refs. 2 and 3 at 2.660 BeV.

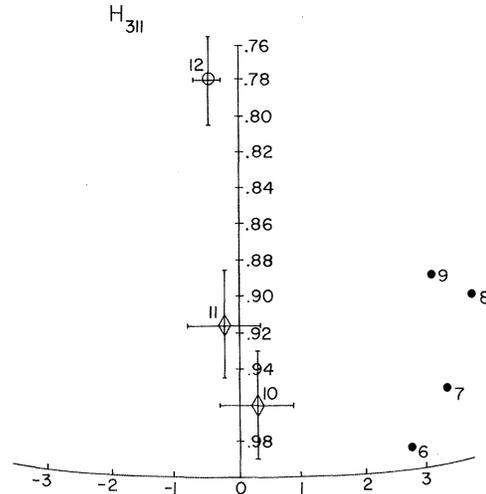


FIG. 2. Comparison of the H_{311} parameters. The notation is the same as in Fig. 1.

and 2. Figure 3 of this note explains the notation and also emphasizes the fact that the other two figures cover only the relevant segment of the Argand diagram, which is very small indeed. The qualitative comments made in the original paper about the relationship between the results of the present Ref. 1 and our results remain unchanged.

We took advantage of the opportunity of presenting the results on a greatly expanded scale, and indicated also the error bars on our results as well as on the results of Ref. 8 of the original paper.² The errors for the latter were not available from Ref. 2, but are given in the preprint version³ of that reference. We are indebted to

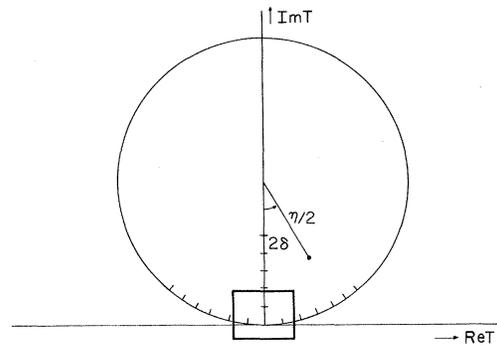


FIG. 3. The usual Argand diagram, showing (heavy black quadrangle) that segment of the diagram which is shown on an enlarged scale in Figs. 1 and 2.

Professor Bareyre for his generous cooperation through private correspondence in supplying us with information on the errors.

This detailed comparison of our results and those of Refs. 2 and 3 shows that indeed there is excellent agreement between us as far as the $H_{3,9}$ parameters are concerned. For the $H_{3,11}$ parameters, the δ 's also agree very well, but there is a discrepancy between the η 's. It should be kept in mind, however, that the method of Refs. 2 and 3 are an energy-dependent, overall fit to data in a large range, of which the compared energy is the upper limit, and hence some disagreement with our single-energy method is not altogether surprising.

¹C. Lovelace, in Proceedings of the International Conference on Elementary Particles, Heidelberg, Germany, 1967, edited by H. Filthuth (North-Holland, Amsterdam, 1968), p. 79.

²R. Ayed, P. Bareyre, and G. Villet, Phys. Lett. 31B, 598 (1970).

³R. Ayed, P. Bareyre, and G. Villet, private communication.

OPTICALLY MODULATED X-RAY DIFFRACTION. Isaac Freund and B. F. Levine [Phys. Rev. Lett. 25, 1241 (1970)].

(1) In Eq. (13) replace $ie/2m\omega_x^2$ by $ie/2m\omega_x$ and $[\hat{a}_s \cdot \vec{Q}(hkl)]$ by $(c/\omega_x)[\hat{a}_s \cdot \vec{Q}(hkl)]$; this makes $\theta_{psl}(hkl)$ dimensionless in accord with previous usage.

(2) In line four following Eq. (17) replace $V - \mathcal{V}(0)$ by $V = \mathcal{V}(0)$.

(3) In the discussion preceding Eq. (22), where $\mathcal{D}_x^{\omega_i}(\vec{r})$ is defined, note that $\omega_i = \omega_1, \omega_2,$ or ω_3 is an optical frequency and that E_x refers to the x component of the optical field $\vec{E}(\omega_i)$.

COLLISIONAL EFFECTS ON INDUCED EMISSION AND ABSORPTION TRANSITION PROBABILITIES IN ATOMIC SYSTEMS. Chung-Nan Chang and Sotiris Koutsoyannis [Phys. Rev. Lett. 25, 1399 (1970)].

Equation (12) of the text should read

$$N \left\langle \frac{\exp(\pm i\vec{k}_l \cdot \vec{R})}{R^3} \right\rangle_{\text{ens}} = \frac{N}{V} \int_{\tau} \frac{\exp(\pm i\vec{k}_l \cdot \vec{R})}{R^3} d\tau = nC,$$

where C is the real quantity

$$C = -4\pi \int_{R^*}^{\infty} \frac{\sin k_l x}{k_l x^2} dx.$$

Upon taking the square of the absolute value of the matrix elements it is found that the transition probabilities are indeed functions of the density n but both are modified by the same factor $(1 + \alpha n)^2$ making their ratio independent of the density to this approximation.

COUPLED-CHANNEL BORN-APPROXIMATION CALCULATION OF TWO-NUCLEON TRANSFER REACTIONS IN DEFORMED NUCLEI. T. Tamura, D. R. Bes, R. A. Broglia, and S. Landowne [Phys. Rev. Lett. 25, 1507 (1970)].

The factor i^l in Eq. (4) was not included in the computation. Therefore, the sign of F_2 and, consequently, the theoretical curves in Figs. 1(a)-1(c) were erroneous. Corrected results that replace those in the old Fig. 1(a) are presented in the new figure given here. The calculations were made with $0^+ - 2^+ - 4^+$ coupling in both incident and exit channels, everything else being the same as in previous calculations. Note the improved agreement with experiment, in particular concerning the 2^+ cross section. Qualitative statements concerning Figs. 1(b) and 1(c), in particular those concerning the importance of the multi-step processes, remain correct. We are very much indebted to Dr. T. Udagawa and Dr. B. Sorensen for their kind cooperation in finding and confirming the above error.

