Low-Energy Theorems for e^4 Compton Scattering.

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Formulae (2) and (11) should be multiplied by 4π . The factor ω^2 in formula (2) should read $\omega_1\omega_2$: Formula (3) should read

$$-(4\pi^2)^{-1}\omega_1 \ln |\omega_1| \int \left(\frac{\omega'}{\omega_1}\right)^2 \varepsilon_2^\lambda C_{\lambda q}^{(2)}(k_2, p_2; k', p') \left(\sum_{\varepsilon'} \varepsilon'^q \varepsilon'^r\right) \cdot C_{r\mu}^{(2)}(k', p'; k_1, p_1) \varepsilon_1^\mu d\Omega' + \text{crossed term}.$$

Formula (4) should read

$$-2e^4(3\pi m^2)^{-1}[\varepsilon_1 \cdot \varepsilon_2(\omega_1 \ln \omega_1 - \omega_2 \ln \omega_2) + m^{-1}(\varepsilon_1 \cdot k_2 \varepsilon_2 \cdot k_1 - 2\omega_1\omega_2 \varepsilon_1 \cdot \varepsilon_2) \ln(\omega_1\omega_2)].$$

Formula (10) should read

$$\begin{aligned} \frac{\omega_1}{4\pi} \int \left(\frac{\omega'}{\omega_1}\right)^2 \varepsilon_2^\lambda C_{\lambda q}^{(2)}(k_2, p_2; k', p') \left(\sum \varepsilon'^q \varepsilon'^r\right) C_{r\mu}^{(2)}(k', p'; k_1, p_1) \varepsilon_1^\mu d\Omega' = \\ = 2e^4(3m^{-1})\omega_1[(1 - 2\omega_1 m^{-1}) \varepsilon_1 \cdot \varepsilon_2 + \omega_1 m^{-1} \varepsilon_1 \cdot \hat{k}_2 \varepsilon_2 \cdot \hat{k}_1 - \\ - i\mu\omega_1 m^{-1}(\varepsilon_2 \cdot \hat{k}_1 \mathbf{S} \cdot \varepsilon_1 \times \hat{k}_1 - \varepsilon_1 \cdot \hat{k}_2 \mathbf{S} \cdot \varepsilon_2 \times \hat{k}_2) + i(2 - 3\mu)\omega_1 m^{-1} \mathbf{S} \cdot \varepsilon_2 \times \varepsilon_1] + O(\omega^3). \end{aligned}$$

Equation (12) should read

$$A = -\varepsilon_2 \cdot \hat{k}_1 \varepsilon' \cdot \hat{k}_2 - \varepsilon_2 \cdot \hat{k}' \varepsilon' \cdot (\hat{k}_1 - \hat{k}_2).$$

Formula (13) should read

$$\begin{aligned} ie^4(3\pi m^4)^{-1}\omega^3 \ln \omega [(2\mu^4 + 9\mu^2 + 2\mu^2 \cos \theta + 8\mu - 4) \cdot \mathbf{S} \cdot (\varepsilon_1 \times \hat{k}_1) \times (\varepsilon_2 \times \hat{k}_2) + \\ + (8\mu - 6) \varepsilon_1 \cdot \varepsilon_2 \mathbf{S} \cdot \hat{k}_2 \times \hat{k}_1 + (3\mu^2 - 4\mu \cos \theta - 16\mu + 10 + 4 \cos \theta) \mathbf{S} \cdot \varepsilon_2 \times \varepsilon_1 + \\ + (\tfrac{1}{2}9\mu^2 + 2\mu \cos \theta - 7\mu)(\varepsilon_2 \cdot \hat{k}_1 \mathbf{S} \cdot \varepsilon_1 \times \hat{k}_1 - \varepsilon_1 \cdot \hat{k}_2 \mathbf{S} \cdot \varepsilon_2 \times \hat{k}_2)]. \end{aligned}$$

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