

Phenomenology of Particle Physics

Errata (24/12/22)

1. **p. 301:** Ex. 9.2, point c, one should read:

$$(c) \pi^+\pi^- \rightarrow \pi^0\pi^0 \text{ and } \pi^0\pi^0 \rightarrow \pi^+\pi^-$$

2. **p. 444:** In point 3, one should read “magnetron frequency” instead of “magneton frequency”.
3. **p. 463:** Equation (14.123) should read $\vec{E}(x, y, z) = -\frac{V_0}{r_0^2} (x, y, -2z)$ instead of $\vec{E}(x, y, z) = \frac{V_0}{r_0^2} (x, y, -2z)$.
4. **p. 463:** Accordingly, equation (14.124) should also have a minus sign in front of the first term:

$$\begin{pmatrix} \ddot{x} \\ \ddot{y} \\ \ddot{z} \end{pmatrix} = -\frac{eV_0}{mr_0^2} \begin{pmatrix} x \\ y \\ -2z \end{pmatrix} + \omega_0 \begin{pmatrix} \dot{y} \\ -\dot{x} \\ 0 \end{pmatrix} \quad (1)$$

5. **p. 551:** Ex 17.3, point c, one should read $\sin \theta = 1/\sqrt{3}$ instead of $\theta = 1/\sqrt{3}$.
6. **p. 814:** Eq. (26.91) should read $\sigma(e^+e^- \rightarrow Z^0 \rightarrow \ell^+\ell^-) = \dots$ instead of $\sigma(e^+e^+ \rightarrow Z^0 \rightarrow \ell^+\ell^-) = \dots$
7. **p. 814:** Eq. (26.93), same
8. **p. 814:** Eq. (26.94), same
9. **p. 994:** Appendix A.13, the first sentence should refer to “Gauss’s theorem” instead of “Stokes’s theorem”.