

Errata for The Feynman Lectures on Physics Volume II New Millennium Edition (7th printing)

The errors in this list appear in *The Feynman Lectures on Physics: New Millennium Edition* and earlier editions; errors validated by Caltech will be corrected in future printings of the *New Millennium Edition* or in future editions.

Errors are listed in the order of their appearance in the book. Each listing consists of the errant text followed by a brief description of the error, followed by corrected text.

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II:iii, par 9

In the early 1950s Leighton played a key role in showing the mu-meson decays into two neutrinos and an electron, ...

Outdated terminology (“mu-meson” vs. “muon”).

In the early 1950s Leighton played a key role in showing the muon decays into two neutrinos and an electron, ...

II:4-9, Eq 4.32

$$\int_{\text{any surface } S} E_n da = \begin{cases} 0; & q \text{ outside } S \\ \frac{q}{\epsilon_0}; & q \text{ inside } S \end{cases} \quad (4.32)$$

Needs clarification and consistency with Eqs. 4.34 and 4.35.

$$\int_{\substack{\text{any closed} \\ \text{surface } S}} E_n da = \begin{cases} 0; & q \text{ outside } S \\ \frac{q}{\epsilon_0}; & q \text{ inside } S \end{cases} \quad (4.32)$$

II:28-12, par 2

There is another particle in the world called a muon —or μ -meson— ...

Outdated terminology (“ μ -meson” vs. “muon”).

There is another particle in the world called a muon ...

II:35-11, par 2

When a proton flips from an upper energy state to a lower one, it will give up the energy $\mu_z B$ which, as we have seen, is equal to $\hbar\omega_p$.

Incorrect statement. The energy of the states is $\pm\mu_z B$ and the difference is $2\mu_z B$.

When a proton flips from an upper energy state to a lower one, it will give up the energy $2\mu_z B$ which, as we have seen, is equal to $\hbar\omega_p$.

II:42-14, par 5

From the measured area of a sphere we can define a predicted radius, $\sqrt{A/4\pi}$, but the actual measured radius will have an excess over this which is proportional (the constant is G/c^2) to the total mass contained inside the sphere.

Missing constant '3', per Eq. (42.3).

From the measured area of a sphere we can define a predicted radius, $\sqrt{A/4\pi}$, but the actual measured radius will have an excess over this which is proportional (the constant is $G/3c^2$) to the total mass contained inside the sphere.