Errata for
The Feynman Lectures on Physics Volume III
New Millennium Edition (5th printing)

The errors in this list appear in the 5th printing of *The Feynman Lectures on Physics: New Millennium Edition* and earlier printings and editions; these errors have been corrected in the 6th printing of the New Millennium Edition.

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.

last updated: 7/3/2015 7:43 AM

copyright © 2000-2015
Michael A. Gottlieb
Playa Tamarindo, Guanacaste
Costa Rica
mg@feynmanlectures.info

III:1-11, par 2 [approved]

… $\Delta x \geq \hbar/2\Delta p$. The uncertainties in the position and momentum at any instant must have their product greater than half the reduced Planck constant.

Inconsistent statement.

… $\Delta x \geq \hbar/2\Delta p$. The uncertainties in the position and momentum at any instant must have their product greater than or equal to half the reduced Planck constant.

III:2-2, par 4 [approved]

Now we might also want to say, since we known the momentum is absolutely horizontal, that …

Grammatical error (‘known’ vs. ‘know’)

Now we might also want to say, since we know the momentum is absolutely horizontal, that …

III:2-4, par 3 [approved]

The same thing works whether the waves are in space and *k* is the number of radians per centimeter and *L* is the length of the train, or the waves are in time and *ω* is the number of oscillations per second and *T* is the “length” in time that the wave train comes in.

Wrong word (oscillations vs. radians).

The same thing works whether the waves are in space and *k* is the number of radians per centimeter and *L* is the length of the train, or the waves are in time and *ω* is the number of radians per second and *T* is the “length” in time that the wave train comes in.

III:7-5, par 3 [approved]

But $E_p = Mc^2$, so …

Inaccurate statement.

At nonrelativistic speeds $E_p \approx Mc^2$, so …

III:7-5, par 3 [approved]

Alternatively, if we use the nonrelativistic expressions, we have …

Needs clarification.

Alternatively, if we use the nonrelativistic expressions Eqs. (7.7) and (7.8), we have …

III:7-13, par 1 [approved]

If you work it out, the amplitude to be in the (+y) state varies as $\cos^2\left\{\left(\mu Bt/\hbar\right)-\pi/4\right\}$, …

Inaccurate statement (‘amplitude’ vs. ‘probability’).

If you work it out, the probability to be in the (+y) state varies as $\cos^2\left\{\left(\mu Bt/\hbar\right)-\pi/4\right\}$, …

III:8-10, par 4

… who worked in the 1830’s, …

Incorrect punctuation.

… who worked in the 1830s, …

III:13-11, par 2

We do not loose any generality if we …

Wrong word (‘loose’ vs. ‘lose’).

We do not lose any generality if we …

III:16-3, par 4

Then, following the general rules, any state at all, say $|\psi\rangle$ is described by giving the amplitudes and that an electron in the state $|\psi\rangle$ is also in one of the states $|x_n\rangle$.

The word 'and' does not belong in this sentence.

Then, following the general rules, any state at all, say $|\psi\rangle$ is described by giving the amplitudes that an electron in the state $|\psi\rangle$ is also in one of the states $|x_n\rangle$.

III:16-4, par 2 [approved]

In the limit, then, as *b* goes to zero, keeping $b^2 A$ equal to *K*, Eq. (16.7) goes over into **…**

"*K*" is undefined.

In the limit, then, as *b* goes to zero, keeping $b^2 A$ equal to $\hbar^2/2m_{\text{eff}}$, Eq. (16.7) goes over into **…**

III:21-4, par 2 [approved]

But according to Gauss's theorem the volume integral of the divergence ***J*** is equal to the surface integral of ***J***.

Inaccurate statement.

But according to Gauss's theorem the volume integral of the divergence ***J*** is equal to the surface integral of its normal component.