Errata for
The Feynman Lectures on Physics Volume I
New Millennium Edition (submitted 6/19/2020)

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.

last updated: 1/18/2020 12:40

copyright © 2000-2019
Michael A. Gottlieb
Playa Tamarindo, Guanacaste
Costa Rica
mg@feynmanlectures.info
I:23-2, par 2

Now a wonderful feature of an exponential function is that \( d(\hat{x}e^{i\omega t})/dt = i\omega \hat{x}e^{i\omega t} \).

Change made for clarification and consistency with Feynman’s blackboard

Now a wonderful feature of an exponential function \( x = \hat{x}e^{i\omega t} \) is that \( dx/dt = i\omega x \).

I:23-2, par 2

… and so it is very simple to write immediately, by inspection, what the equation is for \( \hat{x} \): every time we see a differentiation, we simply multiply by \( i\omega \).

It is \( x \) that when differentiated with respect to time is multiplied by \( i\omega \), and not \( \hat{x} \), which has no dependence on time.

… and so it is very simple to write immediately, by inspection, what the equation is for \( x \): every time we see a differentiation, we simply multiply by \( i\omega \).

I:23-6, par 2

… the second derivative of \( \hat{q} \) is \( (i\omega)^2 \hat{q} \); the first derivative is \( (i\omega)\hat{q} \).

It is \( q \) that when differentiated with respect to time is multiplied by \( i\omega \), and not \( \hat{q} \), which has no dependence on time. \( q = \hat{q}e^{i\omega t} \).

… the second derivative of \( q \) is \( (i\omega)^2 q \); the first derivative is \( (i\omega)q \).

I:23-6, par 3

Thus, since \( \hat{I} = d\hat{q}/dt = i\omega \hat{q} \), …

Inaccurate statement. \( \hat{I} \) and \( \hat{q} \) are constants. \( q = \hat{q}e^{i\omega t} \) and \( I = \hat{I}e^{i\omega t} \).

Thus, since \( I = dq/dt = i\omega q \), …