

Errata for The Feynman Lectures on Physics Volume I New Millennium Edition (submitted 1/28/2024)

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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Michael A. Gottlieb
Playa Tamarindo, Guanacaste
Costa Rica
feynmanlectures@caltech.edu

Errata for The Feynman Lectures on Physics

I:vi, par 5

... a website that Gottlieb created and continues to maintain, *The Feynman Lectures Website*, www.feynmanlectures.info.

The Feynman Lectures Website was moved to Caltech's server in 2014.

... a website that Gottlieb created and continues to maintain, *The Feynman Lectures Website*, feynmanlectures.caltech.edu.

I:vii, par 1

For details of the errata, see www.feynmanlectures.info.

The Feynman Lectures Website was moved to Caltech's server in 2014.

For details of the errata, see feynmanlectures.caltech.edu/info.

I:vii, par 2

The names of all contributors are posted at www.feynmanlectures.info/flp_errata.html.

The Feynman Lectures Website was moved to Caltech's server in 2014.

The names of all contributors are posted at feynmanlectures.caltech.edu/info/flp_errata.html.

I:vii, par 5

Between November 2005 and July 2006, 340 errata were submitted to *The Feynman Lectures Website* www.feynmanlectures.info.

The Feynman Lectures Website was moved to Caltech's server in 2014.

Between November 2005 and July 2006, 340 errata were submitted to *The Feynman Lectures Website* feynmanlectures.caltech.edu.

I:viii, par 4

... and the 50 people who submitted errata (listed at www.feynmanlectures.info).

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Errata for The Feynman Lectures on Physics

I:2-7, par 1

It is not necessary that *science* do that;

In the 9/13/2019 errata this was incorrectly changed to, "It is not necessary that science does that;" What Feynman actually said was, "It's not necessary for science, for that;" which can be made both grammatically correct and closer to what Feynman actually said, as follows.

It is not necessary for *science* to do that;

I:14-4, par 1

The quantity $U(1)-U(2)$ is called the change in the potential energy, and we call U the potential energy.

Sign error. In going from point 1 to 2 the change in potential energy is $U(2)-U(1)$, while as shown in Eq. (14.1) $U(1)-U(2)$ is the work done by conservative force \mathbf{F} , and as stated in the text "for a conservative force, the work done is minus the change in a function U which we call the potential energy."

The quantity $U(2)-U(1)$ is called the change in the potential energy, and we call U the potential energy.

I:27-6, par 2

If parallel light comes in the other way, it comes to a focus at the same distance f from the first principal plane, again as if a thin lens were situated there.

Wrong word ("where" vs. "were").

If parallel light comes in the other way, it comes to a focus at the same distance f from the first principal plane, again as if a thin lens were situated there.

I:30-4, par 5

One case of rather great interest is that which corresponds to $m = 0$, where d is less than λ ; in fact, this is the only solution.

Incorrect statement. It is a well-known fact that subsidiary high-order maxima of a phased array are suppressed only when the array spacing is less than $\lambda/2$. Referring to Eq. (30.7), one can see that the solution $m = -1$ (i.e. $\varphi = -2\pi$) exists when $d/\lambda = -1/(\sin \theta_{\text{out}} - \sin \theta_{\text{in}})$, for example when $d/\lambda = 3/4$, $\sin \theta_{\text{in}} = 1/2$ and $\sin \theta_{\text{out}} = -5/6$.

One case of rather great interest is that which corresponds to $m = 0$, where d is less than $\lambda/2$; in fact, this is the only solution.

Errata for The Feynman Lectures on Physics

I:30-5, par 5

In such circumstances we find the same general kind of a picture as for finite spacing with $d < \lambda$; all the side lobes are practically the same as before, but there are no higher-order maxima.

Incorrect statement. It is a well-known fact that subsidiary high-order maxima of a phased array are suppressed only when the array spacing is less than $\lambda/2$. See correction for I:30-4, par 5.

In such circumstances we find the same general kind of a picture as for finite spacing with $d < \lambda/2$; all the side lobes are practically the same as before, but there are no subsidiary higher-order maxima.