

Errata for The Feynman Lectures on Physics Volume II 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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II: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.

II: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.

II: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.

II:vii, par 5

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

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

II:viii, par 4

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

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... and the 50 people who submitted errata (listed at feynmanlectures.caltech.edu/info).

II:19-12, table

There are some inaccurate values in this table, which should be corrected according to the following (corrected value is red).

b/a	C(true)/2πϵ0	C(first approx.)/2πϵ0
2	1.4423→1.4427	1.500
4	0.721	0.833
10	0.434	0.612→0.611
100	0.217	0.51
1.5	2.4662→2.4663	2.50
1.1	10.492059	10.500000

II:19-13, table

There are some inaccurate values in this table, which should be corrected according to the following (corrected value is red).

b/a	C(true)/2πϵ0	C(quadratic)/2πϵ0
2	1.4423→1.4427	1.444
4	0.721	0.733
10	0.434	0.475
100	0.217	0.346→0.347
1.5	2.4662→2.4663	2.4667
1.1	10.492059	10.492065→10.492063

II:19-13, par 3

For example, when the ratio of the radii is 2 to 1, I have 1.444, which is a very good approximation to the true answer, 1.4423.

Inaccurate value (1.4423 vs 1.4427, see II:19-13 table corrections, above).

For example, when the ratio of the radii is 2 to 1, I have 1.444, which is a very good approximation to the true answer, 1.4427.

II:19-13, par 3

I get that C is 0.346 instead of 0.217.

Inaccurate value (0.346 vs. 0.347, see II:19-13 table corrections, above).

I get that C is 0.347 instead of 0.217.

II:19-13, par 3

... and for a b/a of 1.1, the answer comes out 10.492065 instead of 10.492059.

Inaccurate value (10.492065 vs. 10.490263, see II:19-13 table corrections, above).

... and for a b/a of 1.1, the answer comes out 10.492063 instead of 10.492059.

II:22-3, par 1

We have seen earlier that this emf is equal to the negative rate of change of the current, ...

Inaccurate statement.

We have seen earlier that this emf is proportional to the negative rate of change of the current, ...

II:22-11, par 1

This can be written (by rearranging Eq. (22.20)] as ...

Left parenthesis should be left bracket.

This can be written [by rearranging Eq. (22.20)] as ...

II:33-12, par 2

Notice that k_I is ω/c —which is of the order $1/\lambda_0$, the reciprocal of the free-space wavelength of the light.

Inaccurate statement. When the incident angle θ_i exceeds the critical angle (i.e. $n \cdot \sin \theta_i > 1$), k_I is between 0 (when $\theta_i =$ the critical angle), and approximately $(\omega/c) \cdot 1.145$ (when $\theta_i = \pi/2$), assuming $n = 1.52$ for glass.

Notice that k_I is around ω/c —which is of the order $1/\lambda_0$, the reciprocal of the free-space wavelength of the light.

II:37-1, par 2

Then it is true that the average current in the interior region, over any finite area that is big compared with an atom, is zero when $\mathbf{M} = 0$.

The material being discussed, in which the currents cancel out on average, is *uniformly* magnetized (not *un*-magnetized), as mentioned in the 3rd sentence of this paragraph, which refers also to the discussion in Section 36-1 about a uniformly magnetized rod (illustrated in Fig. 36-2).

Then it is true that the average current in the interior region, over any finite area that is big compared with an atom, is zero when \mathbf{M} is uniform.

II:38-7, par 2

If you take a long rod and suddenly twist one end, a wave of twist works its way along the rod, ...

Grammatical error ('it' vs. 'its').

If you take a long rod and suddenly twist one end, a wave of twist works its way along the rod, ...

II:42-11, par 4

We have two identical clocks, A and B , sitting together on the surface of the earth, as in Fig. 42-19.

Misplaced reference. (See correction for II:42-12, par 3.)

We have two identical clocks, A and B , sitting together on the surface of the earth.

II:42-12, par 3

We have two points A and B both on the earth's surface at some distance from one another.

Misplaced reference. (See correction for II:42-11, par 4.)

We have two points A and B both on the earth's surface at some distance from one another, as in Fig. 42-19.

II:42-13, par 2

Equation (42.16) then says that the object will move so that...

Incorrect reference.

Equation (42.17) then says that the object will move so that...