# Errata for The Feynman Lectures on Physics Volume III 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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#### III: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.

# III: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.

### III: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.

### III: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  $\it The\ Feynman\ Lectures\ Website\ feynmanlectures.caltech.edu.$ 

#### III:viii, par 4

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... and the 50 people who submitted errata (listed at www.feynmanlectures.info).
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## III:6-6, par 3

(By symmetry, we would now expect only one-half of the particles to get through.)

Inaccurate statement.

(By symmetry, we would now expect only one-half of the particles to go into the (+) beam of U.)

## III:10-4, par 1

The energy at this point is lower than the energy of a separated proton and hydrogen ion, so the system is bound.

Wrong word ('ion' vs. 'atom').

The energy at this point is lower than the energy of a separated proton and hydrogen atom, so the system is bound.

# III:11-14, par 3, unnumbered Eq.

$$n + n \rightarrow n + \overline{p} + \overline{K}^0 + K^+$$

Doesn't preserve baryon number. On his blackboard Feynman originally wrote  $n+n \to n+n+K^0+\overline{K}^0$ . Matthew Sands changed this to  $n+n \to n+p+\overline{K}^0+K^+$ , which doesn't preserve charge, so in 2011 it was changed as shown above, which preserves charge, but not baryon number.

$$n + p \rightarrow n + n + \overline{K}^0 + K^+$$

# III:16-14, par 3

We would like now, however, to show you how one of the most remarkable consequence of Schrödinger's equation comes about—

Grammatical error ('consequence' vs. 'consequences').

We would like now, however, to show you how one of the most remarkable consequences of Schrödinger's equation comes about—

#### Errata for The Feynman Lectures on Physics

# III:17-2, par 4

If we have an atom with no *external magnetic* field or no *external electric* field, ...

Transcription error ('or' vs. 'and'). Feynman said "and," meaning no external fields, as stated in the final sentence of the paragraph.

If we have an atom with no external magnetic field and no external electric field,

# III:19-6, par 2

In the states described by the  $\psi_n(r)$  we have found that the probability amplitude for finding the electron is spherically symmetric—depending only on r, the distance for the proton.

Wrong word ('for' vs. 'from').

In the states described by the  $\psi_n(r)$  we have found that the probability amplitude for finding the electron is spherically symmetric—depending only on r, the distance from the proton.