Errata for
The Feynman Lectures on Physics Volume II
Definitive Edition (third printing)

The errors in this list appear in the 3rd printing of *The Feynman Lectures on Physics: Definitive Edition* (2005) and earlier printings and editions; these errors have been corrected in the 4th printing of the *Definitive Edition* (2006).

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:x, par 5

The errata corrected in this edition come from three sources: about 80 per cent are from Michael Gottlieb; most of the rest are from a long list by an anonymous reader, submitted to Feynman in the early 1970s via the publisher; and the remainder are from scattered short lists provided to Feynman or us by various readers.

This is not true of the second printing. A footnote should be added.

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†Based on feedback from interested readers, approximately 340 new errata have been reported in the Lectures since the first printing of the Definitive Edition. Of these errata, approximately 80 have been corrected in the second printing, with more corrections to follow in future printings. A complete list of errata and the names of the contributors are posted at *www.feynmanlectures.info*.

II:1-5, par 1

… multiplied by the circumference of the loop (Fig. 1-5).

$$\text{Circulation} = (\text{average tangential component})\cdot(\text{distance around}). \qquad (1.5)$$

Incorrect punctuation ('.' vs ':') [See, for example, the text preceding Eq 1.4.]

… multiplied by the circumference of the loop (Fig. 1-5):

$$\text{Circulation} = (\text{average tangential component})\cdot(\text{distance around}). \qquad (1.5)$$

II:5-9, par 3

—the fields on the two sides of a closed conducting shell are completely independent.

Error in physics. If there is a field inside the shell, then there will be a field induced outside from charges released on the outer surface of the shell. If there is no field inside, then there will be no field (from induced charges) outside. Thus the two fields are not indepdendent, even though the field on the inside is only from charges on the inside of the shell, and the field on the outside is only from induced charges on the outer surface of the shell.

—the fields on the two sides of a closed grounded conducting shell are completely independent.

II:6-5, par 1

So, using $\phi = q/r,$ we have …

Typographical error ('ϕ' vs 'ϕ_0').

So, using $\phi_0 = q/r,$ we have …

II:6-5, Fig 6-5, caption

… the potential at *P´*(Δ*z* below *P)*

Typographical error – missing space before '('.

… the potential at *P´* (Δ*z* below *P)*

II:6-5, par 3

where $\Delta \boldsymbol{r}$ is then to be replaced by $\boldsymbol{d}/2$.

Missing subscript ('$\Delta \boldsymbol{r}$' vs '$\Delta \boldsymbol{r}_+$').

where $\Delta \boldsymbol{r}_+$ is then to be replaced by $\boldsymbol{d}/2$.

II:8-9, par 1, unnumbered Eq

$1.982 + 0.784 = 2.786$ Mev.

Three errors: (a) Two missing units on left-hand side. (b) Wrong sum on right-hand side.

1.982 Mev $+ 0.784$ Mev $= 2.766$ Mev.

II:26-13, footnote

all components of $F_{\mu\nu}$ corresponsing to components of $\mathbf{E}$ are multiplied by $1/c$.

The (bold) '$\mathbf{E}$' should be (bold italic) '$\boldsymbol{E}$'.

all components of $F_{\mu\nu}$ corresponsing to components of $\boldsymbol{E}$ are multiplied by $1/c$.

II:28-6, Eq. (28.9) [introduced in the Definitive Edition first printing]

$$F = \alpha \frac{e^2}{ac^2}\ddot{x} + \frac{2}{3}\frac{e^2}{c^3}\dddot{x} + \gamma \frac{e^2 a}{c^4}\ddddot{x} + \cdots$$

Wrong sign (2nd term).

$$F = \alpha \frac{e^2}{ac^2}\ddot{x} - \frac{2}{3}\frac{e^2}{c^3}\dddot{x} + \gamma \frac{e^2 a}{c^4}\ddddot{x} + \cdots$$

II:41-3, par 5

From its definition, you see that the units of η are $\text{newton-sec}/\text{m}^2$.

Typographical error ('-' vs. '$\cdot$', see correction for Vol III:21-12, Eq. 21.30 in Commemorative Issue errata).

From its definition, you see that the units of η are $\text{newton}\cdot\text{sec}/\text{m}^2$.

II:41-3, par 5

For water at 20°C,

$$\eta = 10^3 \ \text{newton-sec}/\text{m}^2.$$

(a) Missing negative sign in exponent. (b) Typographical error ('-' vs. '$\cdot$', see correction for Vol III:21-12, Eq. 21.30 in Commemorative Issue errata).

For water at 20°C,

$$\eta = 10^{-3} \ \text{newton}\cdot\text{sec}/\text{m}^2.$$