

# Errata for The Feynman Lectures on Physics Volume III New Millennium Edition (submitted 3/14/2021)

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:3-4, Eq 3.7** (and following text)

$$\langle \mathbf{r}_2 | \mathbf{r}_1 \rangle = \frac{e^{i\mathbf{p}\cdot\mathbf{r}_{12}/\hbar}}{r_{12}}, \quad (3.7)$$

where  $\mathbf{r}_{12} = \mathbf{r}_2 - \mathbf{r}_1$ , and  $\mathbf{p}$  is the momentum...

Incorrect (dot) product in exponent ( $\mathbf{p}\cdot\mathbf{r}_{12}$  vs.  $pr_{12}$ ). Eq. (3.7) is used in chapter 10 to calculate the cross-terms in the Hamiltonian of a 2-state system; it's right-hand side appears just before Eq. (10.9), only there it is written correctly.

$$\langle \mathbf{r}_2 | \mathbf{r}_1 \rangle = \frac{e^{ipr_{12}/\hbar}}{r_{12}}, \quad (3.7)$$

where  $r_{12} = |\mathbf{r}_2 - \mathbf{r}_1|$ , and  $p$  is the momentum...

**III:16-3, par 2**

...which is the amplitude of the state  $|\phi\rangle$  is also in the state  $|i\rangle$  :

Wrong word ("of" vs. "that").

...which is the amplitude that the state  $|\phi\rangle$  is also in the state  $|i\rangle$  :