Introduction to Quantum Mechanics, 3rd edition David Griffiths and Darrell Schroeter Cambridge University Press

Errata (cumulative): January 15, 2019

- Page xii: the stars here do not match the asterisks used in the text (see, for example, Problem 1.3).
- Page 33, Figure 2.2: $\Psi \rightarrow \psi$ (3 times).
- Page 43, 6th line: "Problem 2.3" should be "Problem 2.2."
- Page 45, last line of **Proof**: subscript $\pm \rightarrow \mp$.
- Page 49, line above Equation 2.81: "into Equation 2.80" should be "into Equation 2.79."
- Page 94, Footnote 8: "unfamiliar" is misspelled.
- Page 95, Problem 3.5(b): $(\hat{Q} + \hat{R}) \rightarrow (\hat{Q} + \hat{R})^{\dagger}$.
- Page 103, Footnote 17, last line: "coefficients are" \rightarrow "absolute value of each coefficient is".
- Page 112, Example 3.7, displayed equation: Delete the hyphen in "MeV s", leaving a small space.
- Page 115, Footnote 31, fix font: $\mathbf{b} = \mathbf{Q}\mathbf{a} \rightarrow \mathbf{b} = \mathbf{Q}\mathbf{a}$, as in Equation 3.3.
- Page 140, line before Eq. 4.47: $B_{\ell} \to B$.
- Page 141, Figure 4.2: remove the minus signs in front of the four ℓ s.
- Page 208, Problem 5.10, line 2: "ric states" \rightarrow "ric spin states".
- Page 208, Problem 5.11, lines 1-2: "the wave function can ... as a product of" → "the energy eigenstates can ... as products of".
- Page 241, Problem 6.6, line 4: change the sign of the exponent, so $\psi_{nq}(x) = e^{iqx}u_{nq}(x)$.
- Page 242, 4 lines above Eq. 6.15: guarantees \rightarrow "guarantees".
- Page 262, Problem 6.25: in the displayed equation replace ψ_{210} with ψ_{200} .
- Page 288, displayed equation after Eq. 7.20: $\frac{1}{2m} \rightarrow -\frac{\hbar^2}{2m}$.
- Page 288, Figure 7.5, caption: add "Level (1) is E_{00} , (2) are E_{01} and E_{10} , (3) are E_{20} , E_{11} , and E_{02} . The lines are not straight."

- Page 288, penultimate line, and Page 289, Eq. 7.22: remove argument (x) of ψ_{01} and ψ_{10} [they're also functions of y].
- Page 290, Eq. 7.32: $E_1 \to E^1$ (twice).
- Page 290, Example 7.3, second line of first displayed equation: $\psi_0(y) \rightarrow \psi_1(y)$.
- Page 294, footnote 8: "If the eigenvalues are" \rightarrow "If the eigenvalues of W are".
- Page 302, footnote 16: "the gyromagnetic ratio" \rightarrow "the g-factor".
- Page 308, Equation 7.83, fix subscript: $E_{nm_{\ell}m_s}$.
- Page 359. Equation 9.23: change \approx to \sim .
- Page 361, Equation 9.26: change \cong to \approx .
- Page 361, footnote 8: add at the end, "It is known in the literature as a Geiger-Nuttall plot."
- Page 362, Equation 9.30: change \cong to \approx .
- Page 385, Problem 10.4, line after displayed equation: "are constants" \rightarrow "are positive constants".
- Page 392, line before Equation 10.77: "altered by the potential" → "altered in the scattering region (where V is nonzero)".
- Page 392, footnote 15: add at the beginning, "Either the potential is intrinsically weak, or the incident energy is high."
- Page 397, Problem 10.20: the displayed equation should be changed to read

 $V(\mathbf{r}) = A \, e^{-\mu r^2}.$

In the next line (of text), " V_0 , a, and m" \rightarrow "A, μ , and m".

- Page 433, Problem 11.22 (end): insert "*Hint*: Plug Equation 11.93 into the time-dependent Schrödinger equation and solve for $\dot{\gamma}$, assuming that $\dot{\alpha}$ is negligibly small."
- Page 438, Problem 11.30(c), first line of text (on this page): "the difference effect" \rightarrow "the difference affect".
- Page 470, Footnote 9: Delete "a".
- Page 474, 3 lines above Equation A.65: "two numbers" \rightarrow "two special numbers".
- Page 488: "Geiger-Nuttall plot 361".