ERRATA in 1st printing of UNIT Q (3rd edition)

- Page ii, section on complex numbers: replace $|c^2|$ by $|c|^2$.
- Page 16, problem Q1M.3: starting at the fifth line: replace "transverse waves that move about 60% slower." by "transverse waves that move at about 60% of the P-wave's speed."
- Page 49, problem Q3M.1, third line: change "are separated by" to "have a center-to-center separation of".
- Page 65, problem Q4M.2, first line: change "meta" to "metal".
- Page 66, problem Q4D.1, equation Q4.17, *y* component of last 4-momentum: change $|\vec{p}_e|\sin\phi$ to $-|\vec{p}_e|\sin\phi$.
- Page 76, figure Q5.4: the credit should be "Credit: Reproduced with permission from "Two and three slit electro interference and diffraction experiments" by S. Frabboni, C. Frigeri, G. C. Gazzadi, and Giullo Pozzi, *Am. J. Phys.* **79**, 615 (2011). Copyright 2011, American Association of Physics Teachers."
- Page 85, problem Q5R.1, last sentence: change "Where could you stand" to "If you are 30 m from the doors, where could you stand".
- Page 98, problem Q6T.6, fifth line: change "viewer's right" to "viewer's left" (to be consistent with the following description of the direction of the torque).
- Page 112, equation Q7.14*a*: change the final term from $\sqrt{\frac{1}{2}}|+z\rangle$ to $\sqrt{\frac{1}{2}}|-z\rangle$.
- Page 149, problem Q9A.1, part (b), second line: change $\sin^{-1}(d/\lambda)$ to $\sin^{-1}(n\lambda/d)$.
- Page 157, equation Q10.10: change last item from $\frac{ke^2}{r^2}$ to $\frac{1}{4\pi\varepsilon_0}\frac{e^2}{r^2}$.
- Page 163, problem Q10B.2, second going to third line: change "electron's electron" to "electron's energy".
- Page 164, problem Q10M.9, part (b), third line: change "eigenfunctions" to "eigenfunction's".
- Page 188, section Q12.5, first line: the URL was correct at the time of printing but is no longer. Eventually, one should go to http://www.physics.pomona.edu/sixideas/resources.html for links to all software, but for the moment, one should go to http://www.physics.pomona.edu/sixideas/old/sicpr.html, scroll down to the section on Unit Q, and download the appropriate version of SchroSolver for your computer.
- Page 197, problem Q12B.1, third line: after "0.75 nm wide" add "and 10 eV deep".
- Page 201, equation Q13.20: Change $\tau \equiv \ln 2/t_{1/2}$ to $\tau \equiv t_{1/2}/\ln 2$ (consistent with Q13.20 on page 212).
- Page 223, second line below equation Q14.7*b*: change "impossible" to "possible only".
- Page 226, last line of last full paragraph: change "β^- decay (to increase N/Z)." to "β^- decay (to decrease N/Z)."
- Page 227, Figure 14.6, 4n+1 series: in 2003, it was discovered that ^{209}Bi is actually unstable against α-decay (with an extremely long half-life). So this series actually terminates with ^{205}Tl (thallium-205).
- Page 230, problem Q14M.4, end of the *Hint*: add "Also note that conservation of energy will involve the masses of the *nuclei* involved, but we are given atomic masses. How can one handle this?"
- Page 233, line below equation Q15.8: "initial and final" should be "final and initial"
- Page 247, equation Q15.14*b:* $^3_1$He should be $^3_2$He.
- Page 247, equation Q15.14*c:* the reaction should be $^3_2\text{He} + {}^3_2\text{He} \rightarrow {}^4_2\text{He} + {}^1_1\text{H} + {}^1_1\text{H}$ (the subscripts on all the helium symbols and the superscript on the first hydrogen symbol
- Page 254, equation QA.4a: should read $c^* \equiv a - ib$ (change *c* on right to *a*).
- Page 267, problem QAD.6, part (b), third line: change "wave's energy" to "wave's wavelength".

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