Errata since February 24, 2002 (after the list sent in for the 8th printing) [the latest entry in this new partial list, May 14, 2008]

- p. 106, third of three equations (3.46) Replace the two factors of  $1/4\pi$  each by  $\varepsilon_0$ . [Christian Sohl <Christian.Sohl@eit.lth.se>,May 12, 2008]
- p. 115, five and four lines up Replace  $\lambda = x_{vn}/a$  or  $\lambda = y_{vn}/a$  by k,  $k' = x_{vn}/a$ ,  $x_{vn'}/a$  or k,  $k' = y_{vn}/a$ ,  $y_{vn'}/a$ . [Christian Sohl </ Description: [Christian.Sohl@eit.lth.se>,May 13, 2008]
- p. 120 Equation (3.115) On the left-hand side, the factor  $r^{l}_{>}$  should read  $r^{l}_{<}$ . [Christian Sohl <Christian.Sohl@eit.lth.se>,May 14, 2008]
- p. 126 Equation (3.149) Left parenthesis missing in last  $K_m(k\rho_>)$ . [Christian Sohl <Christian.Sohl@eit.lth.se>,May 14, 2008]

The list below this line was sent in to Wiley as marked pages on February 5, 2008. [Last addition, September 10, 2007]

- p. 52- Problem 1.14 (a) second line  $G_D(\mathbf{x}, \mathbf{x}' \text{ should read } G_D(\mathbf{x}, \mathbf{x}')$ .
- p. 62 Two lines above Eq.(2.10) Replace (Va) with  $(4\pi\varepsilon_0 Va)$ . [Hung-Yi Lee, October 17, 2006]
- p. 72 Seven lines above Eq.(2.59) Replace  $y \le 0$  by  $y \ge 0$ . [Richard Tipping, September 29, 2006]
- p. 86 Problem 2.4 Answer for part (a) should be d/R 1 = 0.6180(34).
- p. 98 Equation (3.18) Delete the parenthesis ( after l(l+1) in the integrand. [James Gilmore, April 25, 2005]
- p. 147 last line of Eq.(4.11) argument of  $Y_{lm}$  should be  $(\theta, \phi)$ , not  $(\rho, \phi)$ . [Bob Pownall, November 15, 2005; Richard Tipping, Sept 29, 2006]
- p. 158 second line  $P_l^l$  should have the subscript *l* directly beneath the superscript *l*.
- p. 177 line above Eq.(5.7) Add "(in Gaussian units multiply right-hand side by 1/c)" [JDJ, July 7, 2005]
- p. 177 line above Eq.(5.8) Change to read "(5.4) and (5.7) with  $k = \mu_0/4\pi$ ]: "

[JDJ, July 7, 2005],

- p. 178 last line of Sect. 5.2 Add new sentence "Note that in Gaussian units, both (5.12) and (5.13) have an added factor *l/c* on the right hand side. "
   [JDJ, July 7, 2005]
- p. 211 line above (5.141) Replace the whole line with " in the definition of the magnetic force (5.7). In SI units Faraday's law (5.136) therefore reads "
   [JDJ, July 7,2005]
- p. 232 Problem 5.28 the definition of  $k^2$  should be  $k^2 = 4ab/[(a+b)^2 + d^2]$ .
- p. 241 Running Head should read Lorenz, not Lorentz. [Ole Keller, Sept 23, 2002]
- p. 242 in line above (6.27), after J add "at a fixed time".
   in Eqs.(6.27) and (6.28) add (x, t) as arguments to the J's on the left and add (x', t) to the J's in the integrals on the right.
  [Suggestion of Fritz Rohrlich, 01.05.03]
- p. 283 line 13 Reference to B. D. Josephson page number is 211, not 21. [Timothy Bragdon, September 9, 2007]
- p. 296 Left-hand side of last equation should read B(x, t).[Richard Tipping, September 29, 2006]
- p. 298 In unnumbered equation in the middle of the page, the first exponential factor on the RHS has an incorrect subscript •x in the exponent. Change  $e^{-k\mathbf{n}_{I}\cdot\mathbf{x}} \rightarrow e^{-k\mathbf{n}_{I}\cdot\mathbf{x}}$ [Correction from Mark Saffman, 03.26.03]
- p. 306 last paragraph of Section 7.3:
  - line above (7.42) Delete the word "both"
  - second equation in (7.42) add  $\pm$  in front of both expressions on RHS.

- Replace the last two sentences with "For the reflected wave the upper (lower) sign holds for polarization parallel (perpendicular) to the plane of incidence. For n' > n there is thus a phase reversal for the reflected wave at normal incidence (See Fig. 7.6)." [to clarify (7.42), Peter Widerin, November 17, 2005]

- p. 320 Equation below (7.69) In the last term, the coefficient should be  $1/\mu$ , not 1/2. [Max Watson, May 10, 2007]
- p. 376 First footnote Z. Naturforsch. 72, should read Z. Naturforsch. A 7,

p. 376 - Third footnote - Replace this footnote with the following;

<sup>‡</sup>The first known discussion of the oscillations in the earth-ionosphere cavity was by G.
F. FitzGerald (Nature 48, 526 (1893)) who estimated the frequency of oscillation to be *10 Hz* and suggested excitation by thunderstorms. In US patent 787,412 (1905), Nikola Tesla estimated the frequency to be *6 Hz* (close to the *real part* of the complex frequency of the strongly damped lowest mode for a perfectly conducting earth with no outer conductor) and described generation and detection of such low-frequency waves.

- p. 380 last line, unnumbered equation The first factor on the RHS should read  $exp[i\omega S(\mathbf{x}_0)/c]$ , not  $exp[i\omega S(\mathbf{x}_0)]$ .
- p. 410, second equation there should be a factor of r in the denominator. [Everett Lipman, 10.10.02]
- p. 451 Problem 9.6(b) The expression for  $\mathbf{B}(\mathbf{x}, t)$  should be multiplied by *c* to decrease the powers of *c* in the denominators by one power each.
- p. 519 unnumbered equation below (11.7) denominator on right should be c', not c.
   [Nigel Buttimore, January 2005]
- p. 556 Eq.(11.139) the left hand side should read  $\mathbf{\epsilon}^{\alpha\beta\gamma\delta}$ , not  $e^{\alpha\beta\gamma\delta}$ . [Stephen Snyder, April 20, 2007]
- p. 577 Problem 11.28 At the beginning of line 3, replace boldface  $\Phi'$  with  $\Phi'$ . [Richard Tipping, September 29, 2006]
- p. 595 Figure 12.5 On the spiraling path of the particle, the second arrowhead from the left should either be reversed or transferred to the earlier segment of the path immediately to its right.
   [Taylor Aune, February 28, 2007]
- p .598 Eq.(12.82), last expression on first line the numerator should read  $q_iq_j$ , not  $q_iq_i$ . [Stephen Snyder, April 20, 2007]
- p. 599 Eq.(12.84) last expression on the right should have 1/c in front of the integral. [Nigel Buttimore, January 2005]
- p. 706 Problem 14.24 Parenthetical sentence at the end Replace with (In a real wire there are the stationary positive ions, possible static surface charge, and even a tiny volume charge density from an internal Hall effect.)

[157 characters, include. spaces] {in response to Assis & Hernandes, in their book}