

Errata

Statistical Mechanics, Third Edition
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page 112, Problem 4.15. The correct value for the latent heat of sublimation of ice near the triple point is 2833 kJ/kg.

page 174, The Hamiltonian in problem 6.9 should read

$$\mathcal{H}(p_r, p_\theta, p_z, r, \theta, z) = \frac{p_r^2}{2m} + \frac{(p_\theta - mr^2\omega)^2}{2mr^2} + \frac{p_z^2}{2m} - \frac{mr^2\omega^2}{2}.$$

page 260, line 4. Replace ‘helium’ with ‘helium, carbon and oxygen’

page 275, Section 9.1, item 1. Replace “Hubble was the first ... Telescope.” with “Hubble was the first to observe this by measuring both the distances to nearby galaxies and their apparent velocities relative to our own galaxy. The former is based on standard candles, astronomical objects with known absolute luminosity. The latter is based on measurements of the cosmological redshift of spectral lines. Standard candles include Cepheid variable stars and type Ia supernovae. Supernovae luminosities are calibrated using Hubble Space Telescope measurements of Cepheids in the same galaxies as nearby supernovae.”

page 276, Figure 9.1, change ‘red-shift’ to ‘redshift’; footnote 3, line 3, replace ‘Doppler shift’ with ‘cosmological redshift’; footnote 3, line 4, replace ‘redshifted’ with ‘redshifted’; footnote 3, line 5, replace ‘Doppler shift’ with ‘cosmological redshift’

page 280, Figure 9.4: upper figure label should read $\Omega_b h^2$, not $\Omega_B h^2$

page 283, line 4, replace ‘1’ with ‘(1)’; last line before eqn. (3a), remove duplicate word ‘are’; footnote 9, line 3, change 0.58 eV to 1.3 eV

page 296. In the result in problem 9.4, the exponent 3/2 should be $-3/2$.

page 296. In the result in problem 9.5, the exponent 3/2 should be $-3/2$.

page 296. The energy density in problem (9.6) should read

$$u_{\text{total}} = (1 + (21/8)(4/11)^{4/3})u_\gamma.$$

page 399, Problem 11.17, line 3, the dimensionless wavefunction should read

$$\psi = a_{\text{osc}}^{3/2} \Psi / \sqrt{N}.$$

page 635, Problems 15.20 and 15.21: The correlation function relation should read:

$$G_{AB}(t) = G_{BA}(-t - i\beta\hbar).$$

page 673, equation (F.18): the semicolon after the equation should be a comma.