Errata

1. On page 23 the last sentence should be:
   “The absorption coefficient is proportional to the absorption strength.”

2. On page 26 Eq. (2.12) should be
   \[ \chi_D^{\text{abs}}(\nu) = \frac{\sqrt{\ln 2} c}{2\sqrt{\pi} \Gamma_D} e^{-\left(\frac{\sqrt{\ln 2} (\nu - \nu_0)}{\Gamma_D}\right)^2} \]

3. On page 35 Eq. (4.19) should be
   \[ w(z) = w_0\sqrt{1 + \frac{z^2}{z_0^2}} \]

4. On page 42 second sentence in the caption of the Figure 5.2 should be:
   “For normal cavity dispersion, when the cavity FSR matches the \( f_{\text{rep}} \) at a particular frequency, the FSR will be smaller than the \( f_{\text{rep}} \) for higher frequencies and larger than the \( f_{\text{rep}} \) for lower frequencies.”

5. On page 76 Eq. (8.5) should be
   \[ T_v^\text{c} (\nu_n, \nu_k) = \frac{T_{\text{res}}^\text{c}}{1 + \left(\frac{\nu_n - \nu_k}{\Gamma_v/2}\right)^2} \]

6. On page 77 Eq. (8.7) should be
   \[ I_0^\text{c} (\nu_k) = \int_{\nu_k - \text{FSR}/2}^{\nu_k + \text{FSR}/2} \frac{T_{\text{res}}^\text{c}}{1 + \left(\frac{\nu - \nu_k}{\Gamma_v/2}\right)^2} \, I(\nu) \, d\nu \]
   and Eq. (8.8) should be
   \[ T_v^\text{A} (\nu_k) \approx \frac{1}{2} \left(\frac{F\delta(\nu)L}{2\pi}\right)^2 \times \frac{T_{\text{res}}^\text{c}}{1 + \left(\frac{\nu - \nu_k - \left[\frac{c\phi(\nu)}{4\pi}(L/L)\right]}{\Gamma_v/2}\right)^2 + \left[\frac{c\delta(\nu)}{4\pi}(L/L)\right]^2} \]

7. On page 87 the sentence after Eq. (9.8) should be:
   “Therefore the Allan deviation is the square root of the normalized sum of the squared differences between the mean values of consecutive subgroups.”