

These are the errors I have found in the book “Introduction to Cosmology” by Barbara Ryden:

1. Page 60, eq. 4.70 should be $\Delta E \Delta t \geq h$
2. Page 68, eq. 5.25 should be $a_{rm} = \frac{e_{r,0}}{e_{m,0}} \approx \frac{1}{3600} \approx 2.8 \times 10^{-4}$
3. Page 77, eq. 5.67 should be $e_r(t) = e_0 \left(\frac{t}{t_0} \right)^{-2} = \frac{3}{32p} \frac{E_p}{l_p^3} \left(\frac{t}{t_p} \right)^{-2} \approx 0.030 \frac{E_p}{l_p^3} \left(\frac{t}{t_p} \right)^{-2}$
 eq. 5.68 should be $T(t) = \left(\frac{45}{32p^3} \right)^{1/4} T_p \left(\frac{t}{t_p} \right)^{-1/2} \approx 0.46 T_p \left(\frac{t}{t_p} \right)^{-1/2}$
 eq. 5.69 should be $E_{mean}(t) \approx 2.70 k T(t) \approx 1.25 E_p \left(\frac{t}{t_p} \right)^{-1/2}$
 eq. 5.70 should be $n(t) = \frac{e_r(t)}{E_{mean}(t)} \approx \frac{0.024}{l_p^3} \left(\frac{t}{t_p} \right)^{-3/2}$
4. Page 78, eq. 5.73 should be $N(t) = V_{hor}(t) n(t) \approx 0.82 \left(\frac{t}{t_p} \right)^{3/2}$
 Page 78, second line after eq. 5.73: $t \approx 1.1 t_p$
5. Page 88, eq. 6.21 should be $t(\mathbf{h}) = \frac{1}{2H_0} \frac{\Omega_0}{(1-\Omega_0)^{3/2}} (\sinh \mathbf{h} - \mathbf{h})$
6. Page 98, eq. 6.42 should be $d_{hor}(t_0) = 3.24c / H_0 = 3.36ct_0 = 14,000 \text{Mpc}$
7. Page 105, eq. 7.14 should be $\frac{1}{a(t)} \approx 1 - H_0(t-t_0) + \left(1 + \frac{q_0}{2}\right) H_0^2(t-t_0)^2$
8. Page 106, eq. 7.17 should be $z \approx H_0(t_0 - t_e) + \left(1 + \frac{q_0}{2}\right) H_0^2(t_0 - t_e)^2$
 eq. 7.18 should be $t_0 - t_e \approx H_0^{-1} \left[z - \left(1 + \frac{q_0}{2}\right) z^2 \right]$
 eq. 7.19 should be $d_p(t_0) \approx \frac{c}{H_0} \left[z - \left(1 + \frac{q_0}{2}\right) z^2 \right] + \frac{cH_0}{2} \frac{z^2}{H_0^2} = \frac{c}{H_0} z \left[1 - \frac{1+q_0}{2} z \right]$