

Essentials of Nucleosynthesis and Theoretical Nuclear Astrophysics

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Errata

1. In Eq. (4.11) “ Y_A ” should be “ Y_a ”. The correct version of the equation reads

$$\lambda_{\text{trans}}^{*,A} = Y_a \rho N_A \langle \sigma^* v \rangle \quad . \quad (4.11)$$

2. The second line of Eq. (4.143) should start with a minus sign. The correct version of the full equation reads

$$\begin{aligned} & \ln \left\{ \frac{Y_X \rho N_A}{G_X} \left[\frac{2\pi \hbar^2}{m_X k_B T} \right]^{3/2} \right\} - N \ln \left\{ \frac{Y_n \rho N_A}{g_n} \left[\frac{2\pi \hbar^2}{m_n k_B T} \right]^{3/2} \right\} \\ & - Z \ln \left\{ \frac{Y_p \rho N_A}{g_p} \left[\frac{2\pi \hbar^2}{m_p k_B T} \right]^{3/2} \right\} \\ & = \frac{1}{k_B T} [Nm_n + Zm_p - m_X] c^2 \quad . \end{aligned} \quad (4.143)$$