

$$\begin{aligned}
c &= 2.998 \times 10^8 \text{ m/s} \\
m_p &= 1.67 \times 10^{-27} \text{ kg} \\
m_e &= 9.109 \times 10^{-31} \text{ kg} \\
e &= 1.6 \times 10^{-19} \text{ C} \\
\Delta t &= \gamma \Delta t' \\
L &= L_p / \gamma \\
x' &= \gamma (x - vt) \\
t' &= \gamma \left(t - \frac{v}{c^2} x \right) \\
\gamma &= \frac{1}{\sqrt{1 - (v^2/c^2)}} \\
(\Delta s)^2 &= (c\Delta t)^2 - (\Delta x)^2 - (\Delta y)^2 - (\Delta z)^2 \\
\gamma &\approx 1 + \frac{v^2}{2c^2} + \dots \\
u'_x &= \frac{u_x - v}{1 - (u_x v / c^2)} \\
f_{\text{obs}} &= \frac{\sqrt{1 + (v/c)}}{\sqrt{1 - (v/c)}} f_{\text{source}} \\
(\Delta s)^2 &= (c\Delta t)^2 - (\Delta x)^2 \\
\vec{p} &= \gamma m \vec{u} \\
K &= \gamma m c^2 - m c^2 \\
E &= \gamma m c^2 \\
E^2 &= p^2 c^2 + (m c^2)^2
\end{aligned}$$