

$$\Gamma(Z \rightarrow \nu\bar{\nu}) = \frac{2\alpha m_Z^3}{3\Lambda^2 \cos^2 \theta_W \sin^2 \theta_W} \left( 1 + \frac{8m_x^2}{m_Z^2} \right) \sqrt{1 - \frac{4m_x^2}{m_Z^2}}$$