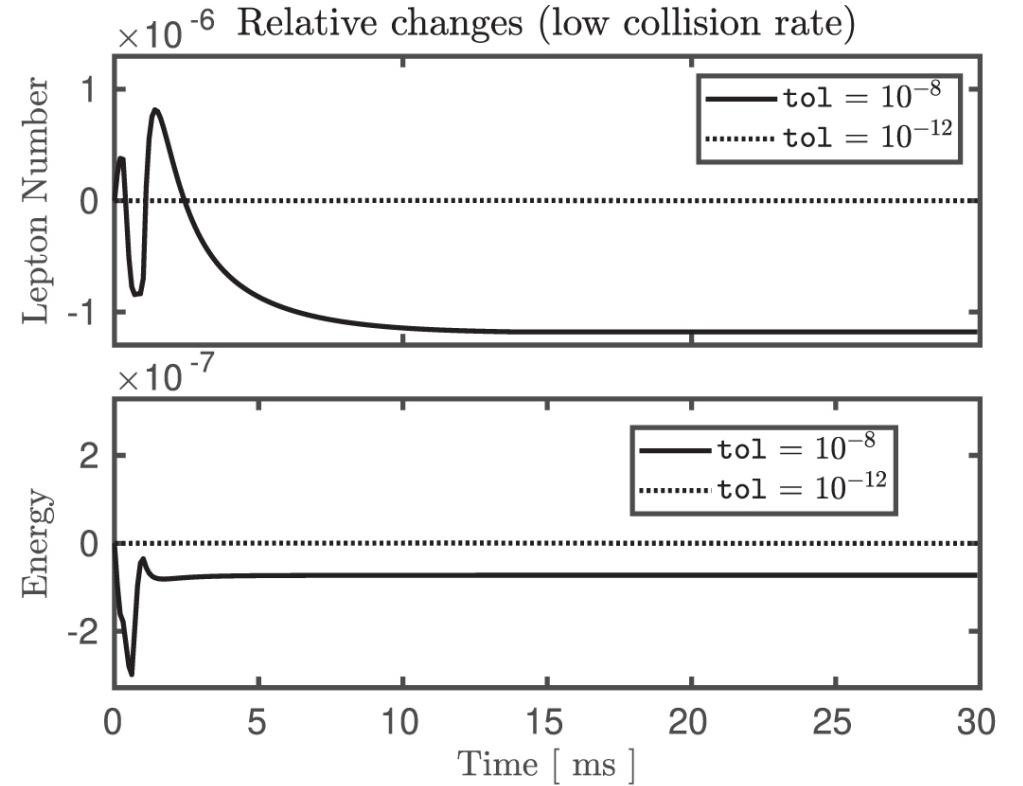


(a) Changes in lepton number and energy relative to their initial values in the relaxation simulation at $r^{(1)}$ from $t = 0$ to $t = t_f = 0.5$ ms. The initial matter state is $\rho = 1.084 \times 10^{14} \text{ g cm}^{-3}$, $T = 1.845 \times 10^{11} \text{ K}$, $Y_e = 0.2728$.



(b) Changes in lepton number and energy relative to their initial values in the relaxation simulation at $r^{(2)}$ from $t = 0$ to $t = t_f = 30$ ms. The initial matter state is $\rho = 1.032 \times 10^{12} \text{ g cm}^{-3}$, $T = 8.806 \times 10^{10} \text{ K}$, $Y_e = 0.1347$.