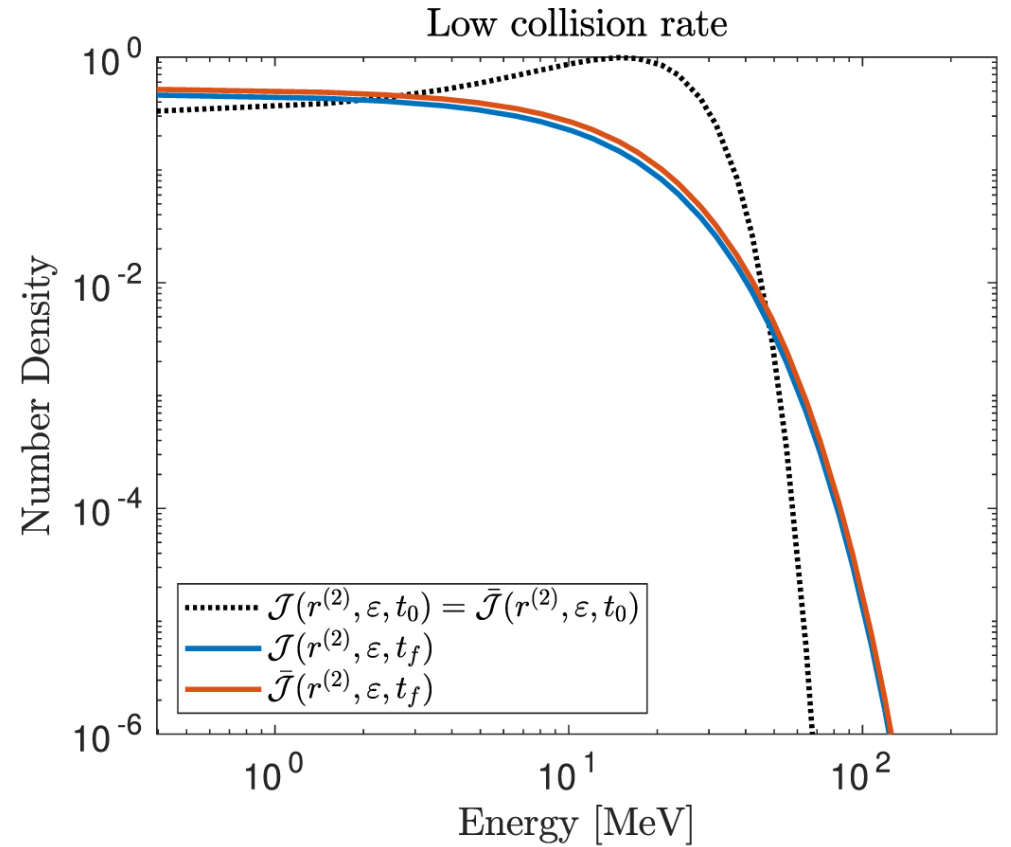


(a) Number density $\mathcal{J}(r^{(1)}, \varepsilon, t)$ at $t = 0$ and $t = t_f = 0.5$ ms. At $r^{(1)}$, with initial matter state $\rho = 1.084 \times 10^{14}$ g cm $^{-3}$, $T = 1.845 \times 10^{11}$ K, $Y_e = 0.2728$.



(b) Number density $\mathcal{J}(r^{(2)}, \varepsilon, t)$ at $t = 0$ and $t = t_f = 30$ ms. At $r^{(2)}$, with initial matter state $\rho = 1.032 \times 10^{12}$ g cm $^{-3}$, $T = 8.806 \times 10^{10}$ K, $Y_e = 0.1347$.