$\tau = \tau_r (M_i/M_r)^{\alpha}$, $\dot{M} = \dot{M}_r (Z/Z_\odot)^{\gamma} (M_r/M_r)^{\beta}$

$M_r = 30\,\mathrm{M}_\odot$, $\tau_r = 10^{6.0}\,\mathrm{yr}$, $\dot{M}_r = 10^{-5.0}\,\mathrm{M}_\odot\,\mathrm{yr}^{-1}$, $\alpha = 0.2$

CHE cut-off M_i — CHE IMF

$\alpha/\beta = 0.05$ | $\alpha/\beta = 0.075$ | $\alpha/\beta = 0.1$ | $\alpha/\beta = 0.19$

$\gamma = 0.2$ | $\gamma = 0.4$ | $\gamma = 0.6$ | $\gamma = 0.8$

$\log \mathrm{d}N_{\mathrm{CHE}}/\mathrm{d}M_{\mathrm{f}}$

$\log M_{\mathrm{f}}/\mathrm{M}_\odot$

Redshift