cooling, growth, & acceleration

$$v_z = v_{mix}\left(\frac{L}{v_{mix} t_{cool}}\right)^{1/4}$$

$$\dot{E}_{cool} \propto P v_z$$

$$\dot{M}_{cold} \propto \rho_{hot} v_z$$

$$\dot{P}_{cold} \propto \rho_{hot} v_{rel}\, v_z$$

cooling, growth, & acceleration

$$v_z = \left(\frac{L v_{mix}^3}{t_{cool}}\right)^{1/4}$$

$$\dot{E}_{cool} \propto P v_z$$

$$\dot{M}_{cold} \propto \rho_{hot} v_z$$

$$\dot{P}_{cold} \propto \rho_{hot} v_{rel} v_z$$