

$$\phi_{\gamma}(E_{\gamma}, T_{\text{SNR}}) = \frac{c}{4\pi d^2} \left[\sum_{t_{\text{age}} \leq \tau_{\text{ev}}} \epsilon_{\gamma}^c(E_{\gamma}, t_{\text{age}}) V_c N(t_{\text{age}}) + \epsilon_{\gamma}^d(E_{\gamma}) V_d \right]$$