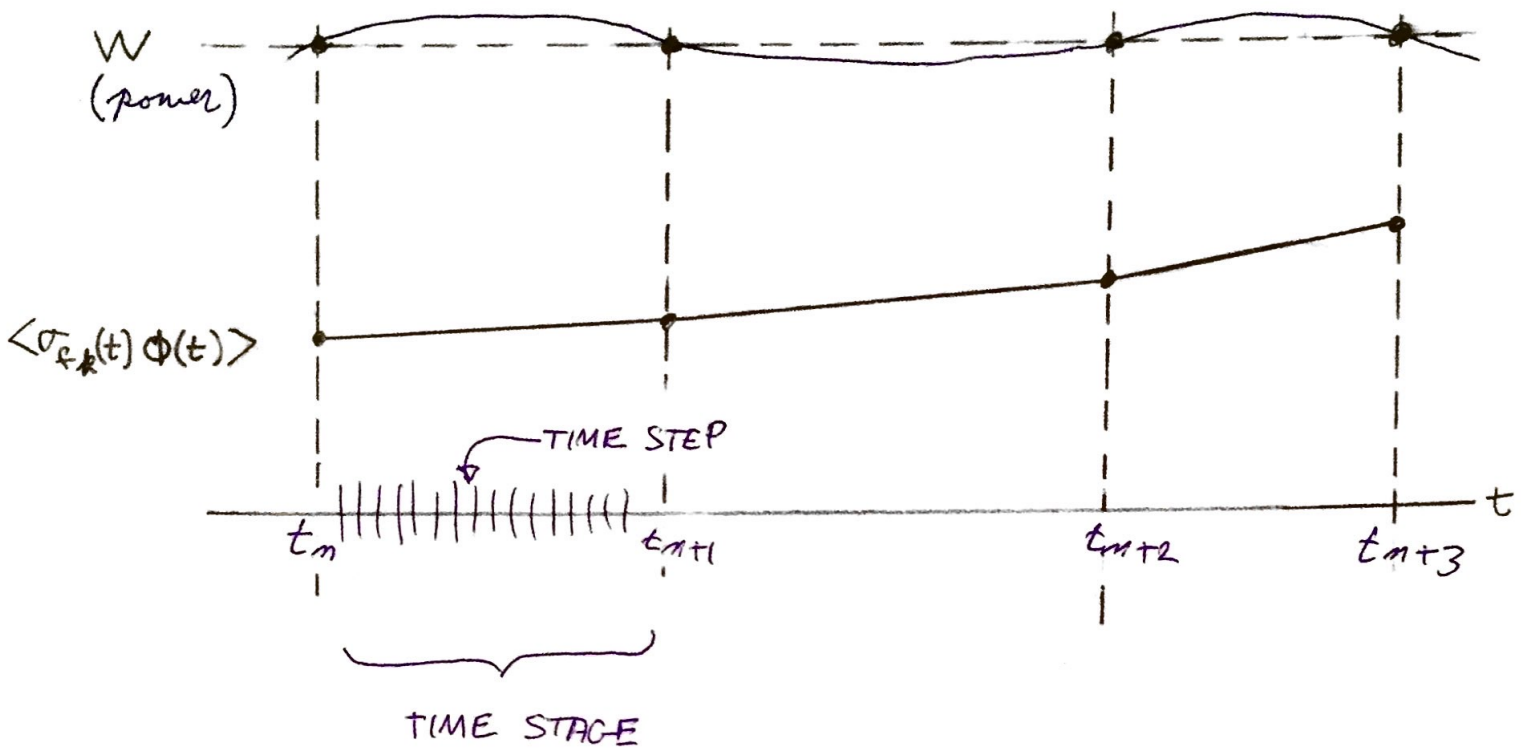


# CONSTANT POWER DEPLETION



$$\langle \sigma_{fk}(t) \phi(t) \rangle = \langle \sigma_{fk}(t_0) \phi(t_0) \rangle + \frac{\langle \sigma_{fk}(t_f) \phi(t_f) \rangle - \langle \sigma_{fk}(t_0) \phi(t_0) \rangle}{t_f - t_0} (t - t_0)$$

LINEAR TIME VARIATION OF MICROSCOPIC REACTION RATES

$$W(t) = \sum_k \left[ \underset{\substack{\uparrow \\ \sim 200 \text{ MeV}}}{k_{fk}} \langle \sigma_{fk}(t) \phi(t) \rangle + \underset{\substack{\uparrow \\ 8 \text{ MeV}}}{k_{\gamma k}} \langle \sigma_{\gamma k}(t) \phi(t) \rangle \right] N_k(t)$$