

$$\lim_{t \rightarrow \infty} \frac{\delta W(t)}{\delta t} \approx \frac{2\hbar}{M\sigma} \propto \Delta U_{\text{eff}}$$

$v_0 = \text{group vel.}$

$\frac{1}{2} v_0 = \text{phase vel.}$

$t=0$

