

$$\frac{\delta S[\chi]}{\delta \chi(t)} = -m \frac{d^2 \chi(t)}{dt^2} - \frac{dV(\chi(t))}{d\chi(t)}$$

$$i\hbar \frac{\delta}{\delta \chi(t)} \exp\{(i/\hbar)S[\chi]\} \\ = \left[ m \frac{d^2 \chi(t)}{dt^2} + \frac{dV(\chi(t))}{d\chi(t)} \right] \exp\{(i/\hbar)S[\chi]\}$$

$$\int_0^T dt \left[ i\hbar \frac{\delta}{\delta \chi(t)} - \frac{dV(\chi(t))}{d\chi(t)} \right] \exp\{(i/\hbar)S[\chi]\}$$

$$= m \int_0^T dt \frac{d^2 \chi(t)}{dt^2}$$

$$= m \left[ \left. \frac{d\chi(t)}{dt} \right|_{t=T} - \left. \frac{d\chi(t)}{dt} \right|_{t=0} \right]$$

$$= 0$$