

$$\frac{i\hbar}{\alpha} \lim_{\varepsilon \rightarrow 0} \frac{\Phi[\chi(\square - \varepsilon)] - \Phi[\chi]}{\varepsilon}$$

$$= \int dt \left\{ \frac{1}{2m} \left[ -\frac{i\hbar}{\alpha} \frac{\delta}{\delta \chi(t)} \right]^2 + V(\chi(t)) \right\} \Phi[\chi]$$



$$- \frac{i\hbar}{\alpha} \int dt \dot{\chi}(t) \frac{\delta}{\delta \chi(t)} \Phi[\chi]$$

$$= \int dt \left\{ \frac{1}{2m} \left[ -\frac{i\hbar}{\alpha} \frac{\delta}{\delta \chi(t)} \right]^2 + V(\chi(t)) \right\} \Phi[\chi]$$



$$\delta \dot{\chi}(t) / \delta \chi(t) = \dot{\delta}(0) = 0$$

$$0 = \int dt \left\{ \frac{1}{2m} \left[ -\frac{i\hbar}{\alpha} \frac{\delta}{\delta \chi(t)} - m \dot{\chi}(t) \right]^2 \right. \\ \left. - \frac{m}{2} [\dot{\chi}(t)]^2 + V(\chi(t)) \right\} \Phi[\chi]$$