

非エンタングル解の形

$$\frac{i\hbar}{\alpha} \left[-\int dt \dot{p}(t) \frac{\partial f(p(t), t)}{\partial p(t)} \right]$$

$$= \int dt \left\{ \frac{1}{2m} \left[\frac{\hbar}{\alpha} p(t) \right]^2 + V(t) \right\}$$

$$\int dt \dot{p}(t) \frac{\partial f(p(t), t)}{\partial p(t)} = \int dt \left\{ \frac{i\hbar}{\alpha} \frac{1}{2m} [p(t)]^2 + V(t) \right\}$$

$$\downarrow \dot{p}(t) \frac{\partial f(p(t), t)}{\partial p(t)} = \frac{df(p(t), t)}{dt} - \frac{\partial f(p(t), t)}{\partial t}$$

$$-\int dt \frac{\partial f(p(t), t)}{\partial t} = \int dt \left\{ \frac{i\hbar}{\alpha} \frac{1}{2m} [p(t)]^2 + V(t) \right\}$$

$$\frac{\partial f(p, t)}{\partial t} = -\frac{i\hbar}{\alpha} \frac{1}{2m} p^2 - u(t) \left\{ \begin{array}{l} \int dt V(t) \\ = \int dt u(t) \end{array} \right.$$

$$f(p, t) = -\frac{i\hbar}{\alpha} \frac{1}{2m} p^2 t + w(t) + h(p)$$

この解は全ての p に対して

$$f(p, t+T) = f(p, t) + 2n\pi i$$

には成り得ない。