

$$dS\left(t\right) S\left(t\right)$$

$$\begin{array}{l}??\\??W\left(t\right) ??\sigma \mu\\????\end{array}$$

$$df\left(t,W\left(t\right) \right) ??f\left(t,W\left(t\right) \right) dtf\left(t,W\left(t\right) \right) =S\left(t\right) ????$$

$$????0dt??\alpha \sigma ^2??$$

$$\begin{array}{l}f\left(t,W\left(t\right) \right) \\????\end{array}$$

$$\begin{array}{l}??????????\Delta t\downarrow 0\Delta t\\????\frac{dt}{dt}\\????\frac{\Delta S(t)}{S(t)}E\frac{\Delta S(t)}{S(t)}=\alpha \Delta tvar\frac{\Delta S(t)}{S(t)}=\sigma ^2\Delta t\Delta t\alpha =0\sigma =40\%\\f\left(t,W\left(t\right) \right) \ln S\left(t\right) S\left(t\right) \left(\alpha -\frac{\sigma ^2}{2}\right) \Delta t\sigma ^2\Delta tS\left(t\right)\end{array}$$