$$\hat{\rho} \xrightarrow{\hat{U}_{\alpha}} \mathbf{E}_{\alpha}[\hat{\rho}]$$
(a) Evolution  $\alpha$ 

$$\hat{U}_{\beta}$$

$$\hat{r} \xrightarrow{\hat{R}(\Delta t)} \mathbf{E}_{\beta}[\hat{\rho}]$$
(b) Evolution  $\beta$