system
$$H_n \stackrel{}{\downarrow} \text{ interaction}$$

$$\rightarrow \bullet \bullet \bullet \rightarrow \qquad \eta_{n+1} \longrightarrow \qquad \eta_n \longrightarrow \qquad \eta_{n-1} \longrightarrow \bullet \bullet \bullet \rightarrow$$
ancillas
$$t = n \Delta t$$