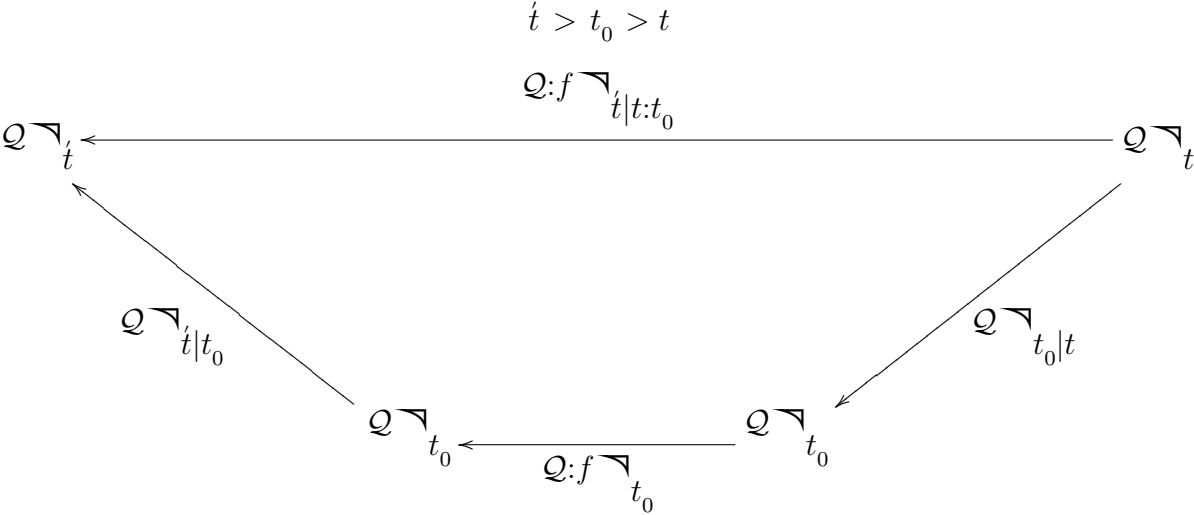
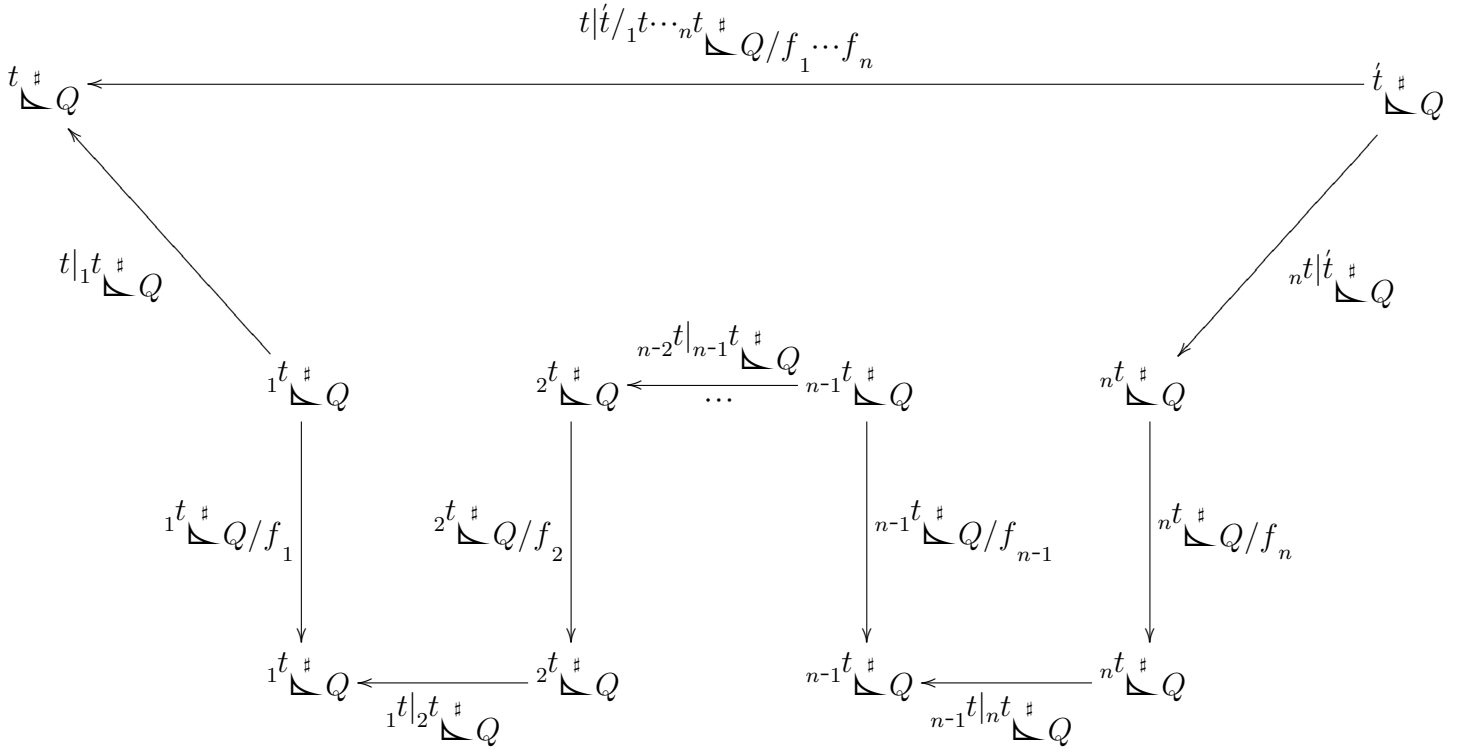




$$\stackrel{\dot{P}}{\left(\mathcal{Q}:f \vartriangleleft_{\dot{t}|t:t_0}\right)}_P = \int\limits_{d\mathbb{P}}^{\stackrel{\dot{t}}{\mathbb{P}} = \dot{P}} f\left({}^{t_0}\mathbb{P}\right) \exp \frac{i}{1/2} \int\limits^{\dot{t}|t} \mathcal{L}\left(\mathbb{P}\right)$$

$$\partial_t \mathcal{Q}:f \vartriangleleft_{0|t|0:t} = \mathcal{H} \rtimes \overline{\mathcal{Q}:f \vartriangleleft_{0|t|0:t}}$$

$$e^{\dot{t}\mathbb{H}} \mathcal{Q}:f \vartriangleleft_{0|t_0|0:t_0} e^{-t\mathbb{H}} = e^{\dot{t}\mathbb{H}} e^{-t_0\mathbb{H}} \mathcal{Q}:f \vartriangleleft_{t_0} e^{t_0\mathbb{H}} e^{-t\mathbb{H}} = e^{\underline{\dot{t}-t_0}\mathbb{H}} \mathcal{Q}:f \vartriangleleft_{t_0} e^{\underline{t_0-t}\mathbb{H}}$$



$$\begin{aligned}
& \overset{P}{\left(t|t'/_1 t \cdots_n t^{\#} Q/f_1 \cdots f_n \right)}_{\dot{P}} = \exp \frac{i}{1/2} \int \mathcal{L}_{\mathbb{P}} \int_{d\mathbb{P}} \prod_i^{P|\dot{P}} f_i \left({}^i t \mathbb{P} \right) \\
& \exp \left(\overline{{}_1 t - t \mathcal{H}} \right) {}_1 t^{\#} Q/f_1 \exp \left(\overline{{}_2 t - {}_1 t \mathcal{H}} \right) {}_2 t^{\#} Q/f_2 \exp \left(\overline{{}_n t - {}_{n-1} t \mathcal{H}} \right) {}_n t^{\#} Q/f_n \exp \left(\overline{{}^i t - {}_n t \mathcal{H}} \right) \\
& = \exp (-t \mathcal{H}) \prod_j \underbrace{\exp \left({}_j t \mathcal{H} \right) {}_j t^{\#} Q/f_j}_{\text{}} \exp \left(-{}_j t \mathcal{H} \right) \exp \left({}^i t \mathcal{H} \right)
\end{aligned}$$