$$
{}^{X}e^{-t_0\mathcal{P}^0}_{\acute{X}} = \int_{d\Sigma}^{|\Sigma|=t} \int_{\mathbb{X}|\dot{\partial}\Sigma=\dot{X}}^{d\mathbb{X}} e^{-\int^{\Sigma}\mathcal{P}(\mathbb{X})}
$$

$$
\Lsh \bowtie \underbrace{e^{-t_0\mathcal{P}^0}}\,\acute{\Lsh} = \int^{dX} {}^{X}\overset{*}{\Lsh}\;{}^{X}\overbrace{e^{-t_0\mathcal{P}^0}\acute{\Lsh}} = \int^{dX} {}^{X}\overset{*}{\Lsh}\int^{d\acute{X}} {}^{X}e^{-t_0\mathcal{P}^0}_{\acute{X}}\;{}^{\acute{X}}\acute{\Lsh} = \int^{dX}\int^{d\acute{X}} {}^{X}\overset{*}{\Lsh}\;{}^{\acute{X}}\acute{\Lsh} \int_{d\Sigma}^{|\Sigma|=t} \int_{\mathbb{X}|\dot{\partial}\Sigma=\dot{X}}^{d\mathbb{X}} e^{-\int^{\Sigma}\mathcal{P}(\mathbb{X})}
$$

$$
\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S = {}^{\mathcal{Q}\underset{-\infty}{\triangledown}S}\overset{2}{\underset{\mu}{\triangle}}\mathbb{C}
$$

$$
\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S \cup \acute{S}\;\; \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S \bowtie \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\acute{S}
$$

$$
\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\underbrace{-S} = \overbrace{\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S}^{\sharp}
$$

$$
\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\varnothing = \mathbb{C}
$$

$$
S \xleftarrow[\text{diffeo}]{\wr} \acute{S} \Longrightarrow \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S \xleftarrow[\text{isometric}]{\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\wr} \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\acute{S}
$$

$$
\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\Sigma \in \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\partial\Sigma
$$

$$
\partial\Sigma = \partial\acute{\Sigma} \Longrightarrow \partial\underbrace{\Sigma - \acute{\Sigma}} = \varnothing \Longrightarrow \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\Sigma \bowtie \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\acute{\Sigma} = \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\underbrace{\acute{\Sigma} - \Sigma} \in \mathbb{C}
$$

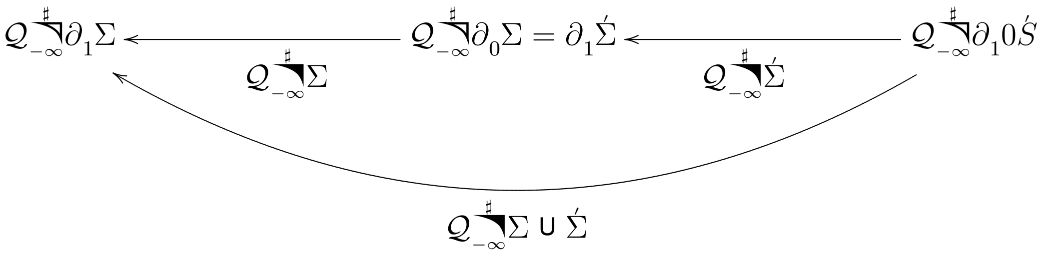
$$
\dim \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S = \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S \times \mathbb{T} \in \mathbb{C} \Longleftarrow \partial(S\times\mathbb{T}) = \varnothing
$$

$$
\operatorname{Diff}(S) \to \mho|\,\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S
$$

$$
\operatorname{tr}\,\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\wr = \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}S\underset{\wr}{\times}\mathbb{I}
$$

$$
\partial\Sigma = \partial_1\Sigma - \partial_0\Sigma \Longrightarrow \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\partial_1\Sigma \xleftarrow{\mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\Sigma} \mathcal{Q}\overset{\sharp}{\underset{-\infty}{\triangledown}}\partial_0\Sigma
$$

$$
\overset{\varphi}{\mathcal{Q}}\overset{\sharp}{\underset{-\infty}{\triangledown}}\underset{\acute{\varphi}}{\Sigma} = \int_{d\Phi}^{\varphi|\acute{\varphi}} \exp\left(-\int^{\Sigma}\mathcal{L}(\Phi)\right)
$$


$\mathcal{Q}^{\sharp}_{-\infty}\partial_1\Sigma$
$\mathcal{Q}^{\sharp}_{-\infty}\partial_0\Sigma = \partial_1\acute{\Sigma}$
$\mathcal{Q}^{\sharp}_{-\infty}\partial_1 0\acute{S}$
$\mathcal{Q}^{\sharp}_{-\infty}\Sigma$
$\mathcal{Q}^{\sharp}_{-\infty}\acute{\Sigma}$
$\mathcal{Q}^{\sharp}_{-\infty}\Sigma \cup \acute{\Sigma}$