

$$\begin{array}{ccc}
\mathcal{C}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} \cap \mathcal{U}|\mathbb{K}; \mathbb{L}; \mathbb{K} & \xrightarrow{a} & \mathcal{U}|_{\omega} \mathbb{L} \\
\uparrow \text{exp} & & \uparrow \text{exp} \\
\mathcal{E}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} \cap \mathcal{U}|\mathbb{K}; \mathbb{L}; \mathbb{K} & \xrightarrow{q} & \mathcal{U}|_{\omega} \mathbb{L}
\end{array}$$

$$\begin{array}{ccc}
\mathbb{U} \mathbb{R}_{1:n:1}^{1:n:1} & \xrightarrow{a} & \mathcal{U}|_{\omega} \mathbb{C}^n \\
\uparrow \text{exp} & & \uparrow \text{exp} \\
\mathbb{U} \mathbb{R}_{1:n:1}^{1:n:1} & \xrightarrow{q} & \mathcal{U}|_{\omega} \mathbb{C}^n
\end{array}$$

$$\mathcal{C}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} \cap \mathcal{U}|\mathbb{K}; \mathbb{L}; \mathbb{K} \xrightarrow{\star} \mathcal{U}|_{\omega} \mathbb{L}$$

$$\mathbb{U} \mathbb{R}_{1:n:1}^{1:n:1} \xrightarrow{\star} \mathcal{U}|_{\omega} \mathbb{C}^n$$

$$\mathcal{E}|\mathbb{K} \times \mathbb{L} \times \mathbb{K} \cap \mathcal{U}|\mathbb{K}; \mathbb{L}; \mathbb{K} \xrightarrow{\star} \mathcal{U}|_{\omega} \mathbb{L}$$

$$\mathbb{U} \mathbb{R}_{1:n:1}^{1:n:1} \xrightarrow{\star} \mathcal{U}|_{\omega} \mathbb{C}^n$$

$$\star \left[\begin{array}{ccc} -\alpha & \mathbb{L} & 0 \\ -\varkappa \bar{\mathbb{L}}^* & \mathbb{L} & -\mathbb{L}^t \\ 0 & \varkappa \bar{\mathbb{L}} & \alpha \end{array} \right] = \underbrace{\mathbb{L} + \mathbb{L} \bar{\mathbb{L}} - \varkappa \mathbb{L} \mathbb{L}^t / 2 \bar{\mathbb{L}} + \mathbb{L} \alpha + \varkappa \mathbb{L} \widehat{\mathbb{L} \bar{\mathbb{L}}^*}}_{\partial \mathbb{L}} \frac{\partial}{\partial \mathbb{L}}$$