

$$\left\{ \begin{array}{l} \mathcal{U} | \mathcal{F} : \Gamma \\ m:n \mathbb{K}_{m:n}^{\mathcal{U}} \end{array} \right. = \frac{\begin{array}{c} \mathcal{J} = \frac{\mathcal{A}}{\mathcal{J}} \Big| \frac{\mathcal{A}}{\mathcal{J}} \\ \mathcal{A} \quad \mathcal{A} \end{array}}{\frac{\mathcal{A} \quad 0}{0 \quad 1} = \mathcal{J} \frac{\mathcal{A} \quad 0}{0 \quad 1} \mathcal{J}^* = \frac{\mathcal{A} \mathcal{A}^* + \mathcal{A} \mathcal{A}^*}{\mathcal{A} \mathcal{J}^* + \mathcal{J} \mathcal{A}^*} \Big| \frac{\mathcal{A} \mathcal{A}^* + \mathcal{A} \mathcal{J}^*}{\mathcal{A} \mathcal{J}^* + \mathcal{J} \mathcal{A}^*}} \xrightarrow{\text{hom}} \left\{ \begin{array}{l} \mathcal{U} | \mathcal{F}_0 \Gamma \\ \mathcal{U} | \mathbb{K}_n^m \end{array} \right. \times$$

$$\left\{ \begin{array}{l} \mathcal{U} | \mathcal{F} : \Gamma \\ m:n \mathbb{K}_{m:n}^{\mathcal{U}} \end{array} \right. = \frac{\begin{array}{c} \mathcal{J} = \frac{\mathcal{A}}{-\mathcal{A}^*} \Big| \frac{\mathcal{A}}{\mathcal{J}} \\ \mathcal{A} + \mathcal{A}^* = 0 = \mathcal{J} + \mathcal{J}^* \end{array}}{\mathcal{A} + \mathcal{A}^* = 0 = \mathcal{J} + \mathcal{J}^*} \xrightarrow{\text{hom}} \left\{ \begin{array}{l} \mathcal{U} | \mathcal{F}_0 \Gamma \\ \mathcal{U} | \mathbb{K}_n^m \end{array} \right. \times$$

$$\times \frac{\mathcal{A}}{-\mathcal{A}^*} \Big| \frac{\mathcal{A}}{\mathcal{J}} = \underbrace{(-\mathcal{A} \mathcal{A}^* + \mathcal{A} \mathcal{J}^* \mathcal{A}^* + \mathcal{A} + \mathcal{A} \mathcal{J}^* \mathcal{J})}_{\partial} \frac{\partial}{\partial \mathcal{A}}$$