

$$S \in \Delta N \Leftrightarrow S \subset N$$

$$\Delta N \overset{\subset}{\mathbb{K}} \Delta N = \Delta N \subset \Delta N \underset{\Delta \mathbb{K}}{=} \begin{cases} \Delta N \times \Delta N \xrightarrow{\mathcal{U}} \mathbb{K} \\ \mathcal{U}^T \neq 0 \curvearrowright S \subset T \end{cases}$$

$$\mathcal{U} * \mathcal{V} \in \Delta N \subset \Delta N \underset{\Delta \mathbb{K}}{=} \xleftarrow[\text{bilin}]{*} \Delta N \subset \Delta N \underset{\Delta \mathbb{K}}{\otimes} \Delta N \subset \Delta N \underset{\Delta \mathbb{K}}{=} \mathcal{U} : \mathcal{V}$$

$$\underset{R}{\mathcal{U} * \mathcal{V}}^T = \sum_{R \subset S \subset T} \mathcal{U}^S \mathcal{V}^T$$