

$$\text{h}_{\Delta_\infty} \text{h}_{\Delta_\infty^m} \xleftarrow{\text{h}\mathbf{x}1 + 1 \boxtimes d} \text{h}_{\Delta_\infty} \text{h}_{\Delta_\infty^{m-1}}$$

$$_M^{\mathbb{b}} \underline{\text{h}\mathbf{x}1 + 1 \boxtimes d} \mathfrak{q} = \sum_{i \in M} \begin{smallmatrix} i \\ M \sqsubset i \end{smallmatrix} \text{h}_{\mathbb{b}} \widehat{\text{h}_{M \sqsubset i} \mathbb{b} \mathfrak{q}} + \sum_{i < j} \begin{smallmatrix} i \\ M \sqsubset i \\ j \\ M \sqsubset j \end{smallmatrix} \left[\begin{smallmatrix} \mathbb{b} \times \mathbb{b} \\ i \mathbb{b} \\ j \mathbb{b} \\ M \sqsubset ij \end{smallmatrix} \right] \mathfrak{q}$$

$$\underline{\text{h}\mathbf{x}1 + 1 \boxtimes d} \underline{\mathfrak{q}\mathbf{x}\mathfrak{q}} \stackrel{p}{=} \underline{\text{h}\mathfrak{q}\mathbf{x}\mathfrak{q}} + \underline{-1 \mathfrak{q}\mathbf{x}\underline{d}\mathfrak{q}} \xrightarrow{\text{Trg-Bed}} \underline{\text{h}\mathbf{x}1 + 1 \boxtimes d} \text{ Diff-Op}$$

$$\text{h}_{\Delta_\infty} \text{h}_{\Delta_\infty^m} \xleftarrow{\text{h}_\mathbb{b} \mathbf{x}1 + 1 \boxtimes \mathfrak{d}_\mathbb{b}} \text{h}_{\Delta_\infty} \text{h}_{\Delta_\infty^m}$$

$$\underline{\text{h}\mathbf{x}1 + 1 \boxtimes d} \mathfrak{q} = \underline{\mathfrak{q}\mathbf{x}\mathfrak{q}} \Rightarrow \widehat{\text{h}_\mathbb{b} \mathbf{x}1 + 1 \boxtimes \mathfrak{b}} \mathfrak{q} = \underline{\mathfrak{q}\underline{\mathfrak{b}}\mathfrak{q}}$$

$$\underline{\text{h}\mathbf{x}1 + 1 \boxtimes d} \mathfrak{q} = \underline{\mathfrak{q}\mathbf{x}\mathfrak{q}} \Rightarrow \widehat{\text{h}_\mathbb{b} \mathbf{x}1 + 1 \boxtimes \mathfrak{d}_\mathbb{b}} \mathfrak{q} = \underline{\mathfrak{q}\underline{\mathfrak{d}}\mathfrak{q}}$$