

$$\mathbb{h}_{\infty}^{\mathbb{h}} \triangleleft \mathbb{h} \triangleleft \mathbb{J} \longleftarrow \underbrace{\mathbb{h}_{\infty}^{\mathbb{h}} \triangleleft \mathbb{J}}_n$$

$$\mathbb{h}_{\infty}^{\mathbb{h}} \triangleleft \mathbb{h} \triangleleft \mathbb{J} \ni \mathbb{L}^j \quad \text{dual standard basis}$$

$$\mathbb{L}^i \star \mathbb{L}^j = \mathbb{L}^i \overset{\circ}{\eta} \mathbb{L}^j = \underset{i}{\mathbb{L}} \overset{\circ}{\eta} \mathbb{L}^j = \eta^{ij}$$

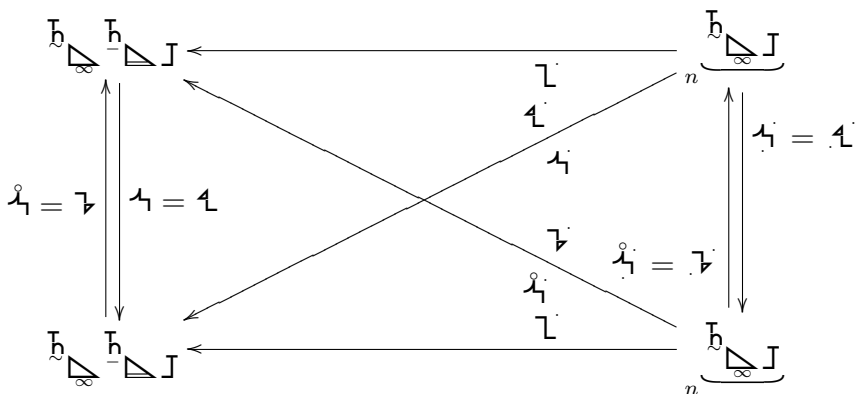
$$\mathbb{h} = \mathbb{L} \underbrace{\mathbb{L} \mathbb{h}}$$

$$\underset{i}{\delta}^j = \underset{i}{\mathbb{L}} \mathbb{L}^j$$

$$\mathbb{h} = \mathbb{L} \underbrace{\mathbb{L} \mathbb{h}}$$

$$\mathbb{L}^* \mathbb{L}^j = \underset{i}{\delta}^j = \underset{i}{\mathbb{L}} \mathbb{L}^j$$

$$\mathbb{L}^* \mathbb{L}^i = \mathbb{L}^i$$



$$\mathbb{L}^i \star_{\mathbb{h}} \mathbb{L}^j = \begin{cases} \mathbb{L}^* \mathbb{L}^j = \mathbb{L}^j \\ \mathbb{L}^* \mathbb{L}^i = \mathbb{L}^i \end{cases}$$

$$\mathbb{h}_{\infty}^{\mathbb{h}} \triangleleft \mathbb{h} \triangleleft \mathbb{J} \ni \begin{cases} \mathbb{L}^j = \mathbb{L}^j \\ \mathbb{L}^i = \mathbb{L}^i \end{cases} \quad \text{dual ONBasis}$$

$$\begin{cases} \mathbb{L}^j = \mathbb{L}^j \mathbb{L}^j \\ \mathbb{L}^i = \mathbb{L}^i \mathbb{L}^i \end{cases}$$

$$\begin{cases} \mathbb{L}^i \mathbb{L}^j \\ \mathbb{L}^i \mathbb{L}^i \end{cases} = \underset{i}{\delta}^j$$

$$\begin{cases} \overset{\circ}{\mathcal{A}}^j &= \mathcal{L}^i \overset{\circ}{\mathcal{A}}^j = \overset{\circ}{\mathcal{A}} \mathcal{L}^j \\ \overset{\circ}{\mathcal{B}}^j &= \mathcal{L}^i \overset{\circ}{\mathcal{B}}^j = \overset{\circ}{\mathcal{B}} \mathcal{L}^j \end{cases}$$

$$\begin{cases} \mathcal{A}^{\cdot j} &= \mathcal{L} \mathcal{A}^{\cdot j} = \mathcal{A} \mathcal{L}^{\cdot j} \\ \mathcal{A}^{\cdot j} &= \mathcal{L} \mathcal{A}^{\cdot j} = \mathcal{A} \mathcal{L}^{\cdot j} \end{cases}$$

$$\begin{cases} \mathcal{A}_i^j &= \mathcal{L}_i \mathcal{A}^j = \mathcal{A}_i \mathcal{L}^j \\ \mathcal{A}_i^j &= \mathcal{L}_i \mathcal{A}^j = \mathcal{A}_i \mathcal{L}^j \end{cases}$$

$$\begin{cases} \overset{\circ}{\mathcal{A}}^{\cdot j} &= \mathcal{L} \overset{\circ}{\mathcal{A}}^{\cdot j} = \overset{\circ}{\mathcal{A}} \mathcal{L}^{\cdot j} \\ \overset{\circ}{\mathcal{B}}^{\cdot j} &= \mathcal{L} \overset{\circ}{\mathcal{B}}^{\cdot j} = \overset{\circ}{\mathcal{B}} \mathcal{L}^{\cdot j} \end{cases}$$

$$\begin{cases} \overset{\circ}{\mathcal{A}}_i^j &= \mathcal{L}_i \overset{\circ}{\mathcal{A}}^j = \overset{\circ}{\mathcal{A}}_i \mathcal{L}^j \\ \overset{\circ}{\mathcal{B}}_i^j &= \mathcal{L}_i \overset{\circ}{\mathcal{B}}^j = \overset{\circ}{\mathcal{B}}_i \mathcal{L}^j \end{cases}$$