

$$\mathfrak{h}_{\infty} \left\{ \begin{array}{c} \mathbb{J} \nabla \mathbb{K} \\ \Gamma \nabla \mathbb{K} \end{array} \right\} \xleftarrow{\quad \mathbb{J}_j \quad} \overbrace{\mathfrak{h}_{\infty} \mathbb{K}}^{2^N}$$

$$\mathfrak{h}_{\infty} \left\{ \begin{array}{c} \mathbb{J} \nabla \mathbb{K} \\ \Gamma \nabla \mathbb{K} \end{array} \right\} \ni \mathbb{J}_j \text{ Standard basis}$$

$$\dot{\mathfrak{h}} = \mathbb{J} \underbrace{\mathbb{J}_j \dot{\mathfrak{h}}}_j \quad {}^I \delta_j = {}^I \mathbb{J} \mathbb{J}_j$$

$$\begin{array}{ccc} & & \overbrace{\mathfrak{h}_{\infty} \mathbb{K}}^{2^N} \\ & \swarrow \mathfrak{r}_j = \mathfrak{r}_j \dot{\mathfrak{h}}_j & \updownarrow \begin{array}{c} \dot{\mathfrak{h}}_j \\ \mathfrak{h}_j \end{array} \\ \mathfrak{h}_{\infty} \left\{ \begin{array}{c} \mathbb{J} \nabla \mathbb{K} \\ \Gamma \nabla \mathbb{K} \end{array} \right\} & & \overbrace{\mathfrak{h}_{\infty} \mathbb{K}}^{2^N} \\ & \nwarrow \mathfrak{r}_j = \mathfrak{r}_j \dot{\mathfrak{h}}_j & \end{array}$$

$$\mathfrak{h}_{\infty} \Gamma \nabla \mathbb{K} \ni \mathfrak{r}_j \text{ basis}$$

$$\dot{\mathfrak{h}} = \mathfrak{r}_j \underbrace{\mathfrak{r}_j \dot{\mathfrak{h}}}_j \quad {}^I \delta_j = \mathfrak{r}_j \mathfrak{r}_j$$