

$$\mathbb{C}^{n|n} \times_{n|n} \mathbb{C} \ni \mathcal{A} = \begin{bmatrix} \mathcal{A}_1 \\ \vdots \\ \mathcal{A}_n \end{bmatrix}$$

$$\begin{array}{ccc} & n|n \mathbb{C} & \\ & \updownarrow & \\ \mathcal{A}_i & & \mathcal{A}_i \\ & n|n \mathbb{C} & \end{array}$$

$$\mathbb{C}^{n|n} \xrightarrow{\mathcal{A}_i} \mathbb{C}^{n|n}$$

$$\mathbb{C}^{n|n} \xrightarrow[\mathcal{B}_h = \mathcal{B} \cdot \eta \cdot \mathcal{B}]{\mathcal{B}_h = \mathcal{A}_i^* \cdot \eta \cdot \mathcal{A}_i} \mathbb{C}^{p|q}$$

$$\mathcal{A}_i = \mathcal{A}_i^* \cdot \eta \cdot \mathcal{A}_i$$

$$\mathcal{A}_i^{\mu\nu} = \mathcal{A}_i^{\lambda\nu} \eta^{ij} \mathcal{A}_i^{\mu\lambda}$$

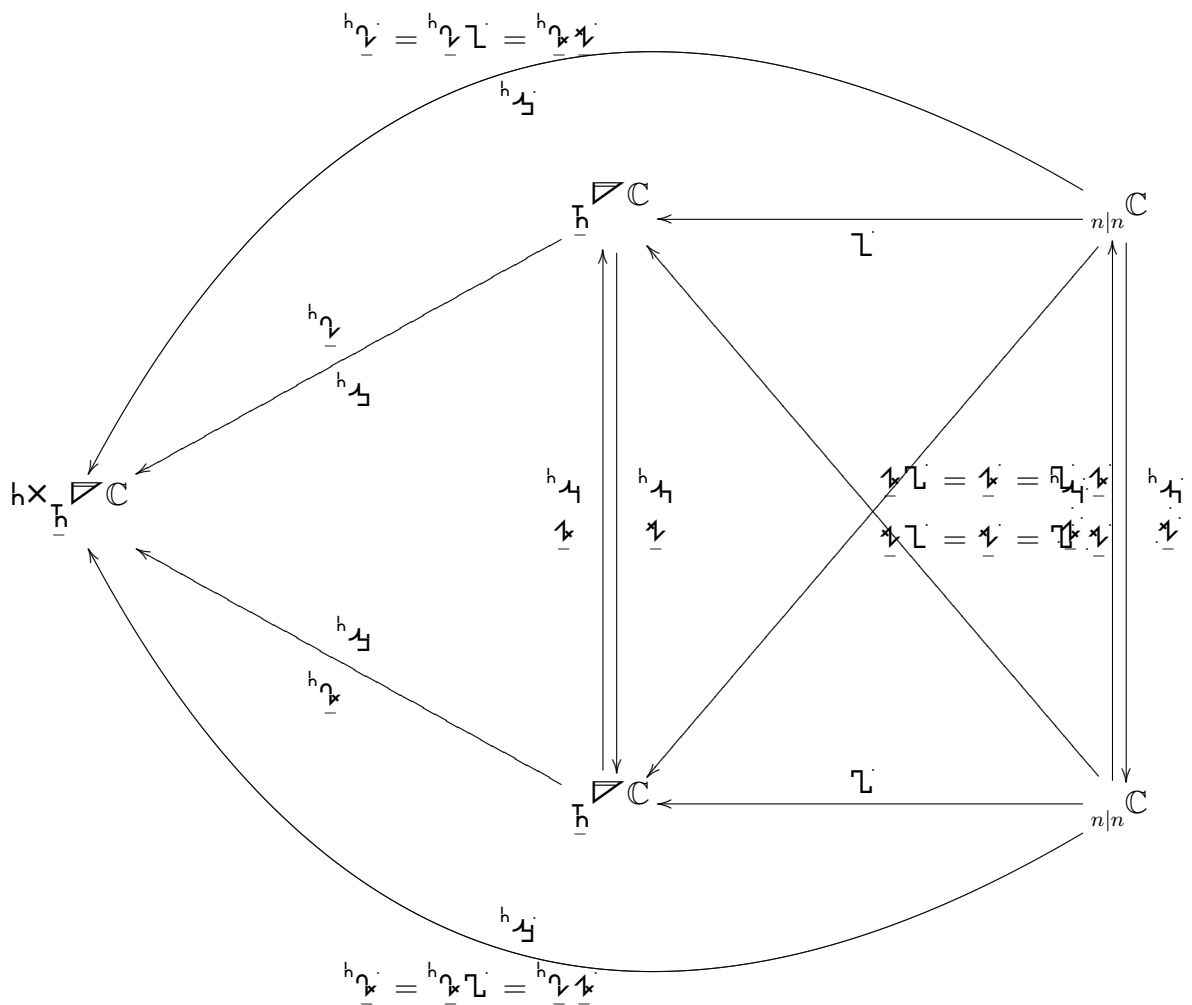
$$\mathcal{B}_h = \mathcal{B} \cdot \eta \cdot \mathcal{B}$$

$$\mathcal{A} = \begin{bmatrix} \mathcal{A}_1 & \mathcal{A}_1 \\ \mathcal{B} & \mathcal{B} \end{bmatrix} : \mu \delta^\nu = \begin{bmatrix} \mathcal{A}_1^k & \mathcal{A}_1^\nu \\ \mathcal{B}^k & \mathcal{B}^\nu \end{bmatrix}$$

$$\mathcal{A} = \begin{bmatrix} \mathcal{A}_1 & \mathcal{A}_1 \\ \mathcal{B} & \mathcal{B} \end{bmatrix} : i \delta^j = \begin{bmatrix} \mathcal{A}_1^\lambda & \mathcal{A}_1^j \\ \mathcal{B}^\lambda & \mathcal{B}^j \end{bmatrix}$$

$$\mathcal{A} \times \mathcal{A} = \mathcal{A} \cdot \eta \cdot \mathcal{A} = \mathcal{A} \cdot \eta^{ij} \cdot \mathcal{A}$$

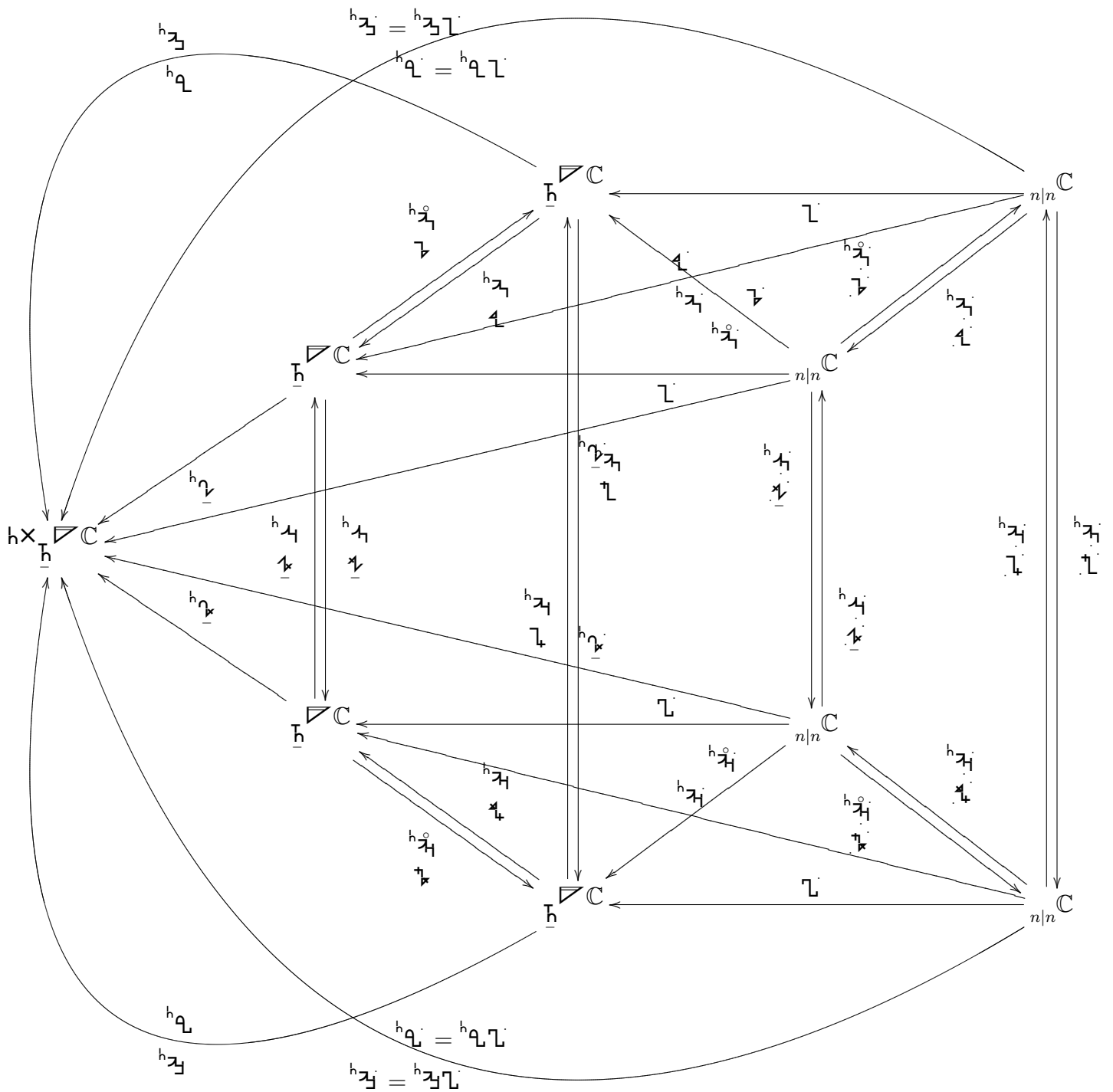
$$\mathcal{A} \times_{\mathcal{B}_h} \mathcal{A} = \begin{cases} \mathcal{A}_i \mathcal{A} \times \mathcal{A}_i \mathcal{A} = \overbrace{\mathcal{A}_i \mathcal{A} \cdot \eta \cdot \mathcal{A}_i \mathcal{A}}^* = \mathcal{A}_i \mathcal{A}_i^* \cdot \eta \cdot \mathcal{A}_i \mathcal{A} = \mathcal{A}_i \mathcal{A}_i^* \cdot \eta \cdot \mathcal{A}_i \mathcal{A} = \mathcal{A}_i \mathcal{A}_i \mathcal{A} = \mathcal{A}_i^{\mu\nu} \mathcal{A} \\ \mathcal{B}_h \mathcal{A} \times \mathcal{B}_h \mathcal{A} = \overbrace{\mathcal{B}_h \mathcal{A} \cdot \eta \cdot \mathcal{B}_h \mathcal{A}}^* = \mathcal{B}_h \mathcal{B}_h \cdot \eta \cdot \mathcal{B}_h \mathcal{A} = \mathcal{B}_h \mathcal{B}_h \cdot \eta \cdot \mathcal{B}_h \mathcal{A} = \mathcal{B}_h \mathcal{B}_h \mathcal{A} = \mathcal{B}_h^{\mu\nu} \mathcal{A} \end{cases}$$



$$h_{\nu} = h_{\nu} \tau = h_{\nu} \nu$$

$$\tau \mathcal{A} = \tau_h \underbrace{h_{\nu} \mathcal{A}}: \quad \tau^{\nu} = \tau_h h_{\nu}^{\nu}$$

$$h_{\nu} \mathcal{A} = h_{\nu} \underbrace{\tau \mathcal{A}}: \quad h_{\nu}^{\nu} = h_{\nu} \tau^{\nu}$$



$$L \cdot \gamma = \begin{Bmatrix} h_{\mathcal{K}} h_{2j} \gamma \\ \tau_h h_{4j} \gamma \end{Bmatrix} : L^j = \begin{Bmatrix} h_{\mathcal{K}} h_{2j}^j \\ \tau_h h_{4j}^j \end{Bmatrix}$$

$$\begin{cases} \underline{h}_3 \cdot \underline{1} = \underline{1}_h \underline{h}_3 \cdot \underline{1} \\ \underline{4} \cdot \underline{1} = \underline{1}_h \underline{h}_4 \cdot \underline{1} \end{cases} \begin{cases} \underline{h}_3^j = \underline{1}_h \underline{h}_3^j \\ \underline{4}^j = \underline{1}_h \underline{h}_4^j \end{cases}$$

$$\begin{cases} \underline{h}_3 \cdot \underline{1} = \underline{h}_3 \underline{h}_3 \cdot \underline{1} \\ \underline{4} \cdot \underline{1} = \underline{4}_h \underline{h}_4 \cdot \underline{1} \end{cases} \begin{cases} \underline{h}_3^\nu = \underline{h}_3 \underline{h}_3^\nu \\ \underline{4}^\nu = \underline{4}_h \underline{h}_4^\nu \end{cases}$$

$$\underline{h}_3 \cdot \underline{1} = \begin{cases} \underline{h}_3 \underline{h}_3 \cdot \underline{1} \\ \underline{4}_h \underline{h}_4 \cdot \underline{1} \end{cases} : \quad \underline{h}_3^\nu = \begin{cases} \underline{h}_3 \underline{h}_3^\nu \\ \underline{4}_h \underline{h}_4^\nu \end{cases}$$

$$\begin{cases} \underline{h}_3 \cdot \underline{1} = \underline{h}_3 \underline{1} \cdot \underline{1} = \underline{h}_3 \underline{h}_3 \cdot \underline{1} \\ \underline{h}_4 \cdot \underline{1} = \underline{h}_4 \underline{1} \cdot \underline{1} = \underline{h}_4 \underline{4} \cdot \underline{1} \end{cases}$$

$$\begin{cases} \underline{h}_3^j = \underline{h}_3 \underline{1}^j = \underline{h}_3 \underline{h}_3^j \\ \underline{h}_4^j = \underline{h}_4 \underline{1}^j = \underline{h}_4 \underline{4}^j \end{cases}$$

