

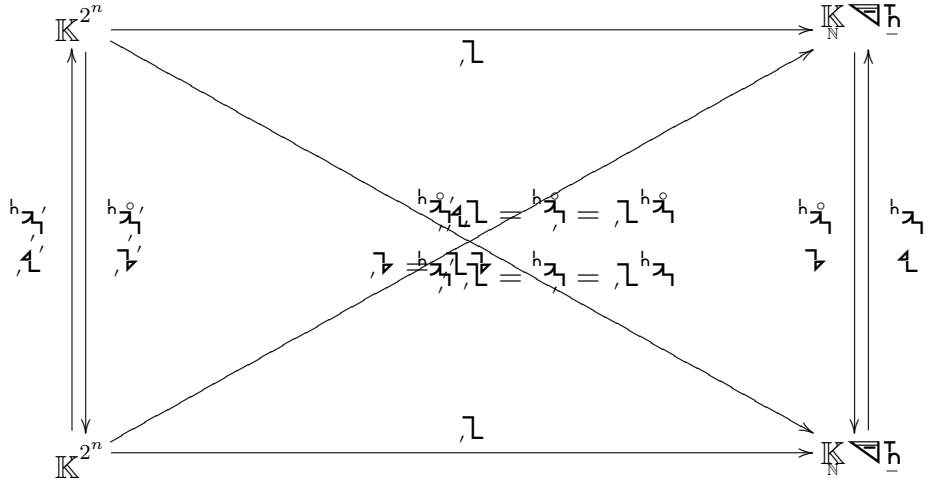
$$\mathbb{K}^{2^n} \xrightarrow{\quad \mathbb{L} \quad} \mathbb{K}_{\mathbb{N}} \overline{\mathbb{H}}$$

$\mathbb{K}_{\mathbb{N}} \overline{\mathbb{H}} \ni \mathbb{L}$ Standardbasis

$${}_i \mathbb{L} \times {}_j \mathbb{L} = {}_i \mathbb{L} \eta \quad {}_j \mathbb{L}^* = {}_i \mathbb{L} \eta \quad \mathbb{L}^J = {}_I \eta^J$$

$$\mathbb{L}' = \underline{\mathbb{L}'} \mathbb{L}' : \quad {}_M \delta^N = {}_M \mathbb{L} \mathbb{L}^N$$

$$\mathbb{L}' = \underline{\mathbb{L}'} \mathbb{L}' : \quad {}_I \delta^J = {}_I \mathbb{L} \mathbb{L}^J$$



$${}_i \mathbb{L} \times {}_j \mathbb{L} = \begin{cases} {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j \\ {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j \end{cases}$$

$$\mathbb{K}_{\mathbb{N}} \overline{\mathbb{H}} \ni \begin{cases} {}_i \mathbb{L} = {}_i \mathbb{L} \mathbb{L}^i \\ {}_i \mathbb{L} = {}_i \mathbb{L} \mathbb{L}^i \end{cases} \text{ ONBasis}$$

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

$$\begin{cases} {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j \\ {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j = {}_i \mathbb{L} \mathbb{L}^j \end{cases} = {}_i \mathbb{L} \eta \quad {}_j \mathbb{L}^* = {}_I \eta$$

$$\mathbb{L}' = \begin{cases} \underline{\mathbb{L}'} \mathbb{L}' \\ \underline{\mathbb{L}'} \mathbb{L}' \end{cases} : \quad {}_I \delta^J = \begin{cases} {}_i \mathbb{L} \mathbb{L}^j \\ {}_i \mathbb{L} \mathbb{L}^j \end{cases}$$

$$\underline{v}' = \left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}} h_{\mathcal{A}'}} \\ \underline{v}'^{\mathcal{A} \mathcal{B}'} \end{array} \right. : M \delta^N = \left\{ \begin{array}{l} h_{\mathcal{A}} h_{\mathcal{A}'^N} \\ h_{\mathcal{A} \mathcal{B}^N} \end{array} \right.$$

$$\underline{v}'^{\mathcal{A} \mathcal{B}} = \left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}, h_{\mathcal{A}}} = \underline{v}'^{h_{\mathcal{A}'}, h_{\mathcal{A}}} \\ \underline{v}'^{\mathcal{B}' \mathcal{A}} = \underline{v}'^{\mathcal{B}' \mathcal{A}} \end{array} \right.$$

$${}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} = \left\{ \begin{array}{l} h_{\mathcal{A}'^L} h_{\mathcal{A}} = h_{\mathcal{A}'^L} h_{\mathcal{A}} \\ {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}^L \mathcal{A}} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}^L \mathcal{A}} \end{array} \right.$$

$$\underline{v}'^{\mathcal{A} \mathcal{B}} = \left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}, h_{\mathcal{A}'}} = \underline{v}'^{h_{\mathcal{A}'}, h_{\mathcal{A}'}} \\ \underline{v}'^{\mathcal{A}' \mathcal{B}} = \underline{v}'^{\mathcal{A}' \mathcal{B}} \end{array} \right.$$

$${}_{\mathcal{M}} \underline{v}'^{\mathcal{B}} = \left\{ \begin{array}{l} h_{\mathcal{A}'^K} h_{\mathcal{A}'^K} = h_{\mathcal{A}'^K} h_{\mathcal{A}'^K} \\ h_{\mathcal{A}'^K} h_{\mathcal{A}'^K} = h_{\mathcal{A}'^K} h_{\mathcal{A}'^K} \end{array} \right.$$

$$\left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}} = \underline{v}'^{\mathcal{A} \mathcal{B}} h_{\mathcal{A}'^K} = \underline{v}'^{h_{\mathcal{A}'}, \mathcal{B}} \\ \underline{v}'^{\mathcal{B}} = \underline{v}'^{\mathcal{A} \mathcal{B}} \mathcal{B} = \underline{v}'^{\mathcal{A}' \mathcal{B}} \mathcal{B} \end{array} \right.$$

$$\left\{ \begin{array}{l} h_{\mathcal{A}'^L} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} h_{\mathcal{A}'^L} = h_{\mathcal{A}'^L} {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} \\ {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} \mathcal{B} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}^L} \mathcal{B} \end{array} \right.$$

$$\left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}} = \underline{v}'^{\mathcal{A} \mathcal{B}} h_{\mathcal{A}'^L} = \underline{v}'^{h_{\mathcal{A}'}, \mathcal{B}} \\ \underline{v}'^{\mathcal{A}} = \underline{v}'^{\mathcal{A} \mathcal{B}} \mathcal{A} = \underline{v}'^{\mathcal{A}' \mathcal{B}} \mathcal{A} \end{array} \right.$$

$$\left\{ \begin{array}{l} h_{\mathcal{A}'^K} = {}_{\mathcal{M}} \underline{v}'^{\mathcal{B}} h_{\mathcal{A}'^K} = h_{\mathcal{A}'^K} {}_{\mathcal{M}} \underline{v}'^{\mathcal{B}} \\ h_{\mathcal{A}'^K} = {}_{\mathcal{M}} \underline{v}'^{\mathcal{A}} h_{\mathcal{A}'^K} = h_{\mathcal{A}'^K} {}_{\mathcal{M}} \underline{v}'^{\mathcal{A}} \end{array} \right.$$

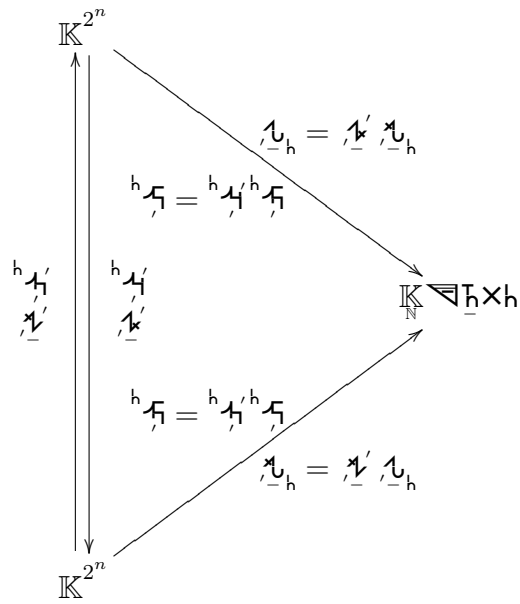
$$\left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}} = \underline{v}'^{\mathcal{A} \mathcal{B}} h_{\mathcal{A}'^L} = \underline{v}'^{h_{\mathcal{A}'}, \mathcal{B}} \\ \underline{v}'^{\mathcal{B}'} = \underline{v}'^{\mathcal{A} \mathcal{B}} \mathcal{B}' = \underline{v}'^{\mathcal{A}' \mathcal{B}} \mathcal{B}' \end{array} \right.$$

$$\left\{ \begin{array}{l} h_{\mathcal{A}'^N} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} h_{\mathcal{A}'^N} = h_{\mathcal{A}'^N} {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} \\ {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}^N} = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}} \mathcal{B}^N = {}_{\mathcal{I}} \underline{v}'^{\mathcal{B}^L} \mathcal{B}^N \end{array} \right.$$

$$\left\{ \begin{array}{l} \underline{v}'^{h_{\mathcal{A}'}} = \underline{v}'^{\mathcal{A} \mathcal{B}} h_{\mathcal{A}'^L} = \underline{v}'^{h_{\mathcal{A}'}, \mathcal{B}} \\ \underline{v}'^{\mathcal{A}'} = \underline{v}'^{\mathcal{A} \mathcal{B}} \mathcal{A}' = \underline{v}'^{\mathcal{A}' \mathcal{B}} \mathcal{A}' \end{array} \right.$$

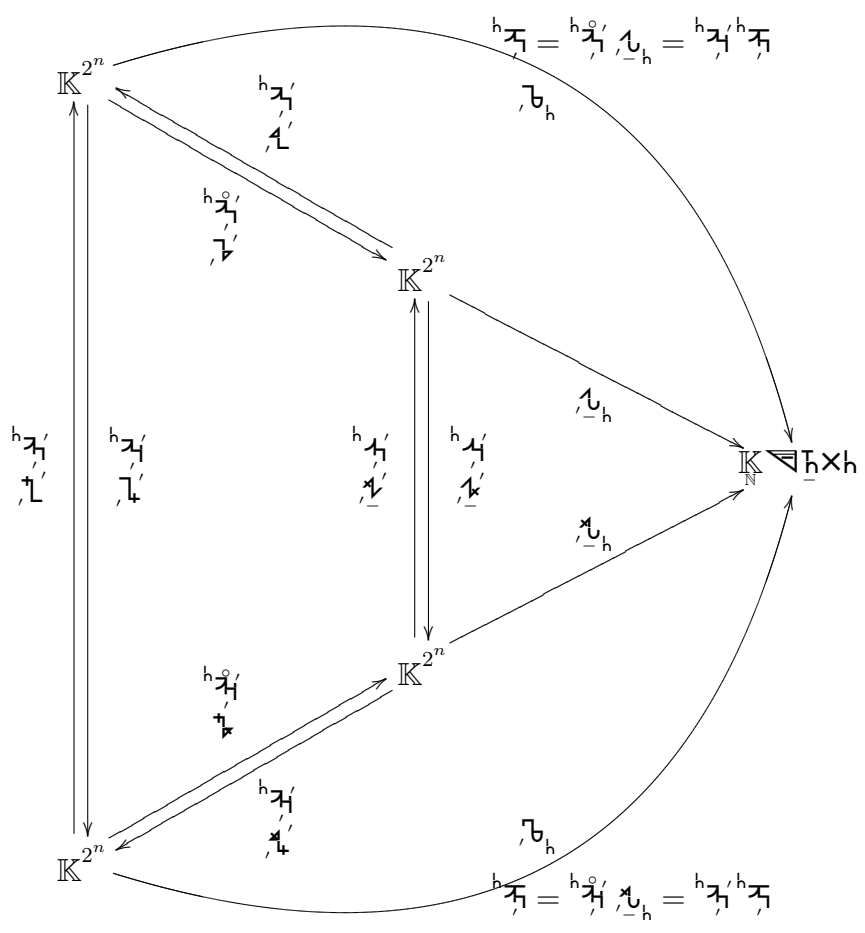
$$\left\{ \begin{array}{l} h_{\mathcal{A}'^J} = {}_{\mathcal{M}} \underline{v}'^{\mathcal{B}} h_{\mathcal{A}'^J} = h_{\mathcal{A}'^J} {}_{\mathcal{M}} \underline{v}'^{\mathcal{B}} \\ h_{\mathcal{A}'^J} = {}_{\mathcal{M}} \underline{v}'^{\mathcal{A}} h_{\mathcal{A}'^J} = h_{\mathcal{A}'^J} {}_{\mathcal{M}} \underline{v}'^{\mathcal{A}} \end{array} \right.$$

$$\mathbb{K}^{2n} \xrightarrow{\mathcal{V}_z} \mathbb{K}_{\mathbb{N}} \nabla_{\mathbb{H}}$$



$\mathbb{K}_{\mathbb{N}} \nabla_{\mathbb{H}} \times \mathbb{h} \ni \mathcal{U}_{\mathbb{H}}$ holonomic basis

$$\mathcal{V}' = \underbrace{\mathcal{V}'_{\mathbb{H}}}_{\mathbb{H}} \mathbb{h} \mathcal{V}' : M \delta^N = M_{\mathbb{H}} \mathbb{h} \mathcal{V}'^N$$



$$\mathbb{K} \rtimes \mathbb{H} \times \mathfrak{h} \ni \begin{cases} \mathcal{L}'_h \\ \mathcal{L}_h \end{cases} \text{ ONbasis}$$

$$\mathcal{L}'_h \mathcal{L}_h = \eta^J$$

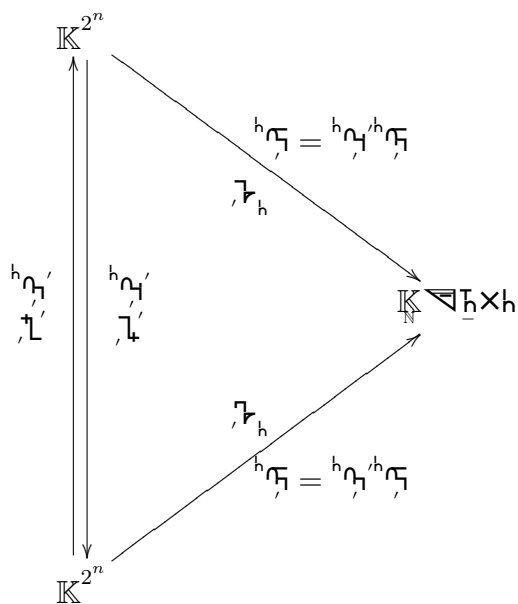
$$\mathcal{L}' = \begin{cases} \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h \mathcal{L}'_h \end{cases} : \mathcal{L}'_h = \begin{cases} \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h \mathcal{L}'_h \end{cases}$$

$$\begin{cases} \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \end{cases} \begin{cases} \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \end{cases}$$

$$\mathcal{L}'_h = \begin{cases} \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h \mathcal{L}'_h \end{cases} \mathcal{L}'_h = \begin{cases} \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h \mathcal{L}'_h \end{cases}$$

$$\begin{cases} \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \end{cases} \begin{cases} \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \\ \mathcal{L}'_h = \mathcal{L}'_h \mathcal{L}'_h \end{cases}$$

$$\begin{cases} \mathcal{L}^h \mathcal{A}' = \mathcal{L}^h \mathcal{U}_h^h \mathcal{A}' & \begin{cases} \mathcal{A}'^J = \mathcal{U}_h^h \mathcal{A}'^J \\ \mathcal{A}'^L = \mathcal{U}_h^h \mathcal{A}'^L \end{cases} \end{cases}$$



$\mathbb{K}_N \triangleleft \bar{h} \ni \bar{h} \times h \ni \mathcal{L}^h \mathcal{A}'$ Basis