$$\not{Z} \times \bar{\not{Z}}_\infty \mathbb{C} \xrightarrow{\ \overline{()}\, \boxtimes\, \overline{()}\ } \mho|^{\not{Z}}_\omega \check{\mathbb{C}} \boxtimes \mho|^{\not{Z}}_\omega \check{\mathbb{C}}$$

$$\Big\downarrow \sharp \qquad\qquad\qquad \Big\downarrow \mathfrak{d}$$

$$\not{Z}_\infty \mathbb{C} \xrightarrow{\ \overline{()}\ } \mho|^{\not{Z}}_\omega \check{\mathbb{C}}$$

$$\overline{\jmath\sharp\imath} = \overline{\jmath}\,\overline{\imath}$$

$$\not{Z} \times \bar{\not{Z}}_\infty \mathbb{C}$$

$$\Big\downarrow \overline{()}$$

$$\mho|^{\not{Z} \times \bar{\not{Z}}}_{\omega^2} \check{\mathbb{C}}$$

$$\overline{x{:}y} = \overline{x}\,\boxtimes\,\overline{y}$$

$$\overrightarrow{x{:}y}\,I = \overrightarrow{x}\,\overrightarrow{y}$$

$$I = \cancel{Z}_u^{-\nu}\boxtimes\bar{\cancel{Z}}_v^{-\nu}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\int\limits_{\mu_v^\nu}^{\cancel{Z}}{}^u\cancel{Z}_v^{-\nu}\ \Subset\ {}^{\cancel{Z}\times\bar{\cancel{Z}}}\!\!\underset{\omega}{\bowtie}\mathbb{C} = {}^{\cancel{Z}}\!\!\underset{\omega}{\bowtie}\check{\mathbb{C}}\boxtimes{}^{\overbrace{\bar{\cancel{Z}}}^{\sharp}}\!\!\underset{\omega}{\bowtie}\check{\mathbb{C}} = \Psi\,\big|\,{}^{\cancel{Z}}\!\!\underset{\omega}{\bowtie}\check{\mathbb{C}}$$

$$\overrightarrow{x{:}y}\,I = \overrightarrow{x}\,\cancel{Z}_u^{-\nu}\boxtimes\overline{\overrightarrow{y}\,\cancel{Z}_v^{-\nu}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\int\limits_{\mu_v^\nu}^{\cancel{Z}}{}^u\cancel{Z}_v^{-\nu}$$

$$\overset{z{:}w}{\overbrace{\overrightarrow{x{:}y}\,I}} = \overset{z}{\overbrace{\overrightarrow{x}\,\cancel{Z}_u^{-\nu}}}\,\overset{w}{\overbrace{\overrightarrow{y}\,\cancel{Z}_v^{-\nu}}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\int\limits_{\mu_v^\nu}^{\cancel{Z}}{}^u\cancel{Z}_v^{-\nu} = \overset{z}{\overbrace{\overrightarrow{x}\,\cancel{Z}_u^{-\nu}}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\underset{\text{hol in }v}{\overset{w}{\overbrace{\overrightarrow{y}\,\cancel{Z}_v^{-\nu}}}}\int\limits_{\mu_v^\nu}^{\cancel{Z}}{}^u\cancel{Z}_v^{-\nu} = \overset{z}{\overbrace{\overrightarrow{x}\,\cancel{Z}_u^{-\nu}}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\cancel{Z}_u^{-\nu}\ \overset{\cancel{\nu}}{\boxtimes}\ \overset{w}{\overbrace{\overrightarrow{y}\,\cancel{Z}_-^{-\nu}}}$$

$$\underset{\text{repr}}{=}\overset{z}{\overbrace{\overrightarrow{x}\,\cancel{Z}_u^{-\nu}}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\overset{w}{\overbrace{\overrightarrow{y}\,\cancel{Z}_u^{-\nu}}}\underset{\text{s.a.}}{=}\overset{u}{\overbrace{\overrightarrow{x}\,\cancel{Z}_z^{-\nu}}}\int\limits_{\mu_u^\nu}^{\cancel{Z}}\overset{u}{\overbrace{\overrightarrow{y}\,\cancel{Z}_w^{-\nu}}} = \underbrace{\overrightarrow{x}\,\cancel{Z}_z^{-\nu}}\boxtimes\underbrace{\overrightarrow{y}\,\cancel{Z}_w^{-\nu}} = \cancel{Z}_z^{-\nu}\boxtimes\underbrace{\overrightarrow{x}\,\overrightarrow{y}\,\cancel{Z}_w^{-\nu}} = \overset{z{:}w}{\underbrace{\overrightarrow{x}\,\overrightarrow{y}}}$$

$$\overrightarrow{\lrcorner\sharp\llcorner} = \overrightarrow{\lrcorner\boxtimes\llcorner}\,I$$

$$\overrightarrow{\sharp F} = \overrightarrow{F}\,I\ \Subset\ {}^{\cancel{Z}\times\bar{\cancel{Z}}}\!\!\underset{\omega}{\overset{2}{\bowtie}}\check{\mathbb{C}}$$