$$\underset{\smile}{\overset{Z}{\triangle}} \overset{\leqslant n}{\mathbb{C}} \xleftarrow[\text{met}]{\text{rep}} U \ltimes \underset{\smile}{\overset{Z}{\triangle}} \overset{\leqslant n}{\mathbb{C}}$$

$${}^{\zeta}\overbrace{y^{n}_{T}\blacktriangleleft} = {}^{\zeta}_{T}y^{n}\,{}^{\zeta y}\blacktriangleleft$$

$$U^{n} = \underset{\smile}{\overset{Z}{\triangle}} \overset{\leqslant n}{\mathbb{C}} = \mathbb{C}\frac{{}_{T}G^{n}_{-\omega}}{\omega \in Z}$$

$${}_{T}G^{n}_{-\zeta} \,\bar{\wedge}\, {}_{T}G^{n}_{-\omega} = {}^{\zeta}_{T}G^{n}_{-\omega}$$

$${}^{z}_{K}y\ {}^{zy}_{K}G^{-1}_{-w\bar{y}^{*}}\ {}^{w}_{K}\bar{y}^{*} = {}^{z}_{K}G^{-1}_{-w}$$

$$U \ni y \Longrightarrow {}^{zy}_{K}G_{-wy} = {}^{w}_{K}y^{*}\ {}^{z}_{K}G_{-w}\ {}^{z}_{K}y$$

$$G \ni y \Longrightarrow \overset{-1}{y} = J\overset{*}{y}J \Longrightarrow y = J\,\overset{-*}{y}\,J$$

$$U \ni y \Longrightarrow \overset{-*}{y} = y$$

$${}^{z}_{T}G^{p}_{w} = \overbrace{{}^{z}_{K}G_{w}}$$

$${}^{z}_{T}y^{-n}\ {}^{zy}_{T}G^{n}_{-wy}\ {}^{w}_{T}\overset{*}{y}^{-n} = \overbrace{{}^{z}_{K}y}^{-n/p}\ {}^{zy}_{T}G^{n}_{-wy}\ \overbrace{{}^{w}_{K}y}^{*}{}^{-n/p} = {}^{z}_{T}G^{n}_{-w}$$

$$\blacktriangleleft \in \underset{\smile}{\overset{Z}{\triangle}} \overset{\leqslant n}{\mathbb{C}} \ni {}^{\zeta}_{T}G^{n}_{-\omega} = \overbrace{1+\zeta\overset{*}{\omega}}^{n}$$

$$\underset{1}{G}^{C}\ {}^{\zeta}_{K}n_{\omega} = {}^{\zeta}_{T}G^{n}_{-\omega}$$

$$\overset{-1}{y}{}^{-n}_{T}\;{}_{T}G^{n}_{-\omega} = {}_{T}G^{n}_{-\omega\overset{-}{y}^{*}}\;{}^{\omega}_{T}\overset{-*}{y}{}^{-*n}$$

$$U \ni y \Longrightarrow \overset{-1}{y} \ltimes {}_{T}G^{n}_{-\omega} = {}_{T}G^{n}_{-\omega y}\;{}^{\omega}_{T}y^{-*n}$$

$$\overbrace{\overset{-1}{y} \ltimes {}_{T}G^{n}_{-\omega}}^{\zeta y} = {}^{\zeta y}_{T}\overset{-1}{y}{}^{-n}\;{}^{\zeta}_{T}G^{n}_{-\omega} = {}^{\zeta}_{T}y^{n}\;{}^{\zeta}_{T}G^{n}_{-\omega} = {}^{\zeta}_{T}y^{n}\;\underbrace{{}^{\zeta}_{T}y^{-n}\,{}^{\zeta y}_{T}G^{n}_{-\omega\overset{-}{y}^{*}T}\;{}^{\omega}\overset{-*}{y}{}^{-*n}} = {}^{\zeta y}_{T}G^{n}_{-\omega\overset{-}{y}^{*}}\;{}^{\omega}_{T}\overset{-*}{y}{}^{-*n}$$

$$U \ni y \Longrightarrow \overset{-*}{y} = y$$

$$\begin{tikzcd}
Z \underset{\smile}{\triangle} \overset{\leqslant n}{\mathbb{C}} & & T^{-n} \arrow[ll, "{}_{T}G^{n}_{-w}"'] \arrow[d, "{}^{w}_{T}\overset{*}{y}{}^{n}"] \\
Z \underset{\smile}{\triangle} \overset{\leqslant n}{\mathbb{C}} \arrow[u, "y^{n}_{T}"] & & T^{n} \arrow[ll, "{}_{T}G^{n}_{-wy}"]
\end{tikzcd}$$

$$\underbrace{y \ltimes \blacktriangleleft}\,\bar{\bowtie}\,\underbrace{y \ltimes \dashv} = \blacktriangleleft\bar{\bowtie}\dashv$$

$$\underbrace{\overset{-1}{y} \ltimes {}_{T}G^{n}_{-\zeta}}\,\bar{\bowtie}\,\underbrace{\overset{-1}{y} \ltimes {}_{T}G^{n}_{-\omega}} = \underbrace{{}_{T}G^{n}_{-\zeta y T}\,{}^{\zeta}y^{-*n}}\,\bar{\bowtie}\,\underbrace{{}_{T}G^{n}_{-\omega y T}\,{}^{\omega}y^{-*n}} = {}^{\zeta}_{T}y^{-n}\;\underbrace{{}_{T}G^{n}_{-\zeta y}\,\bar{\bowtie}\,{}_{T}G^{n}_{-\omega y}}\;{}^{\omega}_{T}y^{-*n} = {}^{\zeta}_{T}y^{-n}\;{}^{\zeta y}_{T}G^{n}_{-\omega y}\;{}^{\omega}_{T}y^{-*n} = {}^{\zeta}_{T}G^{n}$$

$$ {}^{w}\widetilde{F} = {}^{w^{z}y}_{\sim}F\,\det\left(1 + \overbrace{a+zc}^{-1}\,wc\right)^{n}$$