

$$\begin{aligned} \mathbb{C}^{\frac{2}{\omega}} &= \frac{J \in \mathbb{C}^{\frac{2}{\omega}}}{J \times J < +\infty} \\ \underbrace{S_x J}_z &= z + x J \\ \underbrace{T_\xi J}_z &= \exp(\pi i \xi^2 \tau + 2\pi i \xi z) z + \xi \tau J \\ S_x S_y &= S_{x+y} \\ T_\xi T_\eta &= T_{\xi+\eta} \\ S_x T_\xi &= \exp(2\pi i x \xi) T_\xi S_x \\ \mathbb{T} \times \mathbb{R} \times \mathbb{R} &\ni \lambda: \downarrow \uparrow \\ \underbrace{\downarrow \uparrow} \underbrace{\downarrow \uparrow} &= 2\pi i \uparrow \downarrow \mathbf{e}: \downarrow + \downarrow \uparrow + \uparrow \end{aligned}$$

$$\mathbb{C}^{\frac{2}{\omega}} \xleftarrow{\text{hom}} \mathbb{T} \times \mathbb{R} \times \mathbb{R} \times \mathbb{C}^{\frac{2}{\omega}}$$

$$\begin{aligned} J &\in \mathbb{C}^{\frac{2}{\omega}} \\ \underbrace{\downarrow \uparrow \times J}_\Gamma &= \pi i \downarrow \tau \downarrow + 2\pi i \Gamma \downarrow \mathbf{e}_{\Gamma + \downarrow \tau + \uparrow} J \\ \underbrace{\downarrow \times J}_\Gamma &= \pi i \downarrow \tau \downarrow + 2\pi i \Gamma \downarrow \mathbf{e}_{\Gamma + \downarrow \tau} J \\ \underbrace{\uparrow \times J}_\Gamma &= \Gamma + \uparrow J \\ \underbrace{\uparrow \times \downarrow \times J} &= 2\pi i \uparrow \downarrow \mathbf{e}_{\downarrow \times \uparrow \times} \end{aligned}$$

$$\tau = u + iw$$

$$J \times \downarrow = \int_{dxdy}^{\mathbb{C}} -2\pi \Gamma^{-1} \bar{\Gamma} \mathbf{e}_{\Gamma \bar{J} \Gamma} \downarrow$$

$$\mathbb{C}^{\frac{2}{\omega}} \xleftarrow{\text{unit}} \mathbb{T} \times \mathbb{R} \times \mathbb{R} \times \mathbb{C}^{\frac{2}{\omega}}$$

$$\begin{aligned}
\mathbb{T} \times \mathbb{R} \times \mathbb{R} &\xrightarrow{\text{hom}} \mathcal{U} \Big|_{\mathbb{R}} \mathbb{C} \\
\mathbb{R} \mathbb{C} &\leftarrow \mathbb{T} \times \mathbb{R} \times \mathbb{R} \times \mathbb{R} \mathbb{C} \\
\overline{1:j:t} \times J &= 2\pi i x \downarrow e_{x+t} J
\end{aligned}$$