

$$\begin{array}{c}
\mathbb{O}_{\mathbb{C}}^{\nu_{\mathbb{C}}} \triangleleft_{\mathbb{C}}^2 \mathbb{C} \\
\downarrow \text{restr / Toep / Weyl} \\
\mathbb{O}_{\mathbb{R}}^2 \triangleleft_{\mathbb{R}}^2 \mathbb{C}
\end{array}$$

$$\mathbb{O}_{\mathbb{C}}^{\gamma_{\mathbb{C}}} \triangleleft_{\mathbb{C}}^2 \mathbb{C}$$

$$\gamma_{\mathbb{C}} = \gamma \frac{2r}{r_{\mathbb{C}}}$$

$$r_{\mathbb{C}} \gamma_{\mathbb{C}} = 2r\gamma$$

$${}^z I = {}^z \mathbb{O}_{\mathbb{C}}^{-\nu/2} \in \mathbb{O}_{\mathbb{C}}^{\nu_{\mathbb{C}}} \triangleleft_{\mathbb{C}}^2 \mathbb{C}$$

$$\text{field / } \zeta \triangleleft_{\mathbb{C}} = \zeta \rtimes \mathbb{1}$$

$$f \rtimes_{\mathbb{R}} \triangleleft_{\mathbb{C}} = \overline{f}^{\nu_{\mathbb{C}}} \rtimes \mathbb{1}$$

$$\triangleleft_{\mathbb{R}} \rtimes f = \mathbb{1} \rtimes \overline{f}^{\nu_{\mathbb{C}}}$$

$${}^x f^* \int_{\mu_x^0}^{D_{\mathbb{R}}} x \underline{F} = \overline{f}^{\nu_{\mathbb{C}}} \rtimes F = {}^z \overline{f}^* \int_{\mu_z^{\nu}}^{D_{\mathbb{C}}} z F$$

$${}^x \overline{F}^* \int_{\mu_x^0}^{D_{\mathbb{R}}} x f = F \rtimes \overline{f}^{\nu_{\mathbb{C}}} = {}^z \overline{F}^* \int_{\mu_z^{\nu}}^{D_{\mathbb{C}}} z \overline{f}$$

$${}_{\mathbb{R}} G \ni g \xrightarrow{\text{cov}} g^{\nu} \mathbb{1} = g \rtimes \triangleleft_{\mathbb{C}}$$

$$\zeta \mathbb{O}_{\mathbb{C}}^{-\nu} z = {}^z \overline{\zeta}^*$$

$${}^z \overline{f} \underset{\text{repr}}{=} \zeta \mathbb{O}_{\mathbb{C}}^{-\nu} z \int_{\mu_{\zeta}^{\nu}}^{D_{\mathbb{C}}} \zeta \overline{f} = \mathbb{O}_{\mathbb{C}}^{-\nu} z \rtimes \overline{f}^{\nu_{\mathbb{C}}} = \underbrace{{}^x \mathbb{O}_{\mathbb{C}}^{-\nu} z}_{z \overline{\zeta}^*} \int_{\mu_x^0}^{D_{\mathbb{R}}} x f$$

$${}_{\mathbb{R}}G \ni g \xrightarrow{\text{cov}} \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w g}_{-}^{-\nu} = g \times \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}$$

$$\text{reconstr / } \zeta \underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\in \mathbb{R}} = \underbrace{z g}_{-\zeta} \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu} \int_{\mu_z^{\nu \mathbb{C}}}^{D_{\mathbb{C}}} z \gamma$$

$$\text{LHS} = \underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\zeta} \times \underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\zeta} \int_{\mu_z^{\nu \mathbb{C}}}^{D_{\mathbb{C}}} z \gamma = \text{RHS}$$

$$\zeta \underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\tau} = \zeta F \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu/2} = \frac{\zeta F}{I(\zeta)} \text{ Toep restr}$$

$$\underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\tau} = \varrho \left( F I^{-1} \right)$$

$$\underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\tau} = \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu} \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu/2} = \overbrace{T^*}_{\mathbb{O}_{\mathbb{C}}} \underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}$$

$$\underbrace{\underbrace{{}_{\mathbb{O}_{\mathbb{C}}}w}_{-}^{-\nu}}_{\sigma} \text{ Weyl restr}$$