

product case

$$\mathcal{Z} \xrightarrow{\#} \mathcal{Z}$$

Jor refl

$$\mathcal{Z} = \mathcal{Z}_+ \times \mathcal{Z}_-$$

$$\mathcal{Z}_\pm = \begin{matrix} \pm \\ \diagdown \\ \mathcal{Z} \end{matrix}$$

$$\mathcal{Z} = Z \times Z$$

$$\overline{z:w} = (w:z)$$

$$\mathcal{Z}_+ = \frac{z:z}{z \in Z}$$

$$\mathcal{Z}_- = \frac{z:-z}{z \in Z} = Z$$

$$\mathcal{G} = G \times G$$

$$\mathcal{G} \times \mathcal{G} \xrightarrow{\text{tens}} \mathcal{G} \xrightarrow{\text{res}} \mathcal{G}$$

$$[\mathcal{G}] = [G] \boxtimes [G]$$

$$B_{\triangleleft} \overline{Z_{\triangleleft}^{\mu} \mathbb{C}^{\mu}} \xleftarrow{g_{TK}^{-\nu\mu}} B_{\triangleleft} \overline{Z_{\triangleleft}^{\mu} \mathbb{C}^{\mu}} : {}^{z|\zeta} \overline{g_{TK}^{-\nu\mu} \mathfrak{A}} = {}^z g^{\nu} {}^{z|g|\zeta} \underline{g} \mathfrak{A}$$

$$\left\{ \begin{array}{l} \sum_{\mu}^{r\mathbb{N}_+} B_{\triangleleft} \overline{Z_{\triangleleft}^{\mu} \mathbb{C}^{\mu}} \xleftarrow{\exists} \underbrace{B_{\triangleleft}^{-\nu_1} \mathbb{C}^{\mu}} \boxtimes \underbrace{B_{\triangleleft}^{-\nu_2} \mathbb{C}^{\mu}} \quad \nu_1 \geq \nu_2 > a(r-1)/2 \\ \sum_{\mu}^{k\mathbb{N}_+} B_{\triangleleft} \overline{Z_{\triangleleft}^{\mu} \mathbb{C}^{\mu}} \xleftarrow{\exists} \underbrace{B_{\triangleleft}^{-\nu_1} \mathbb{C}^{\mu}} \boxtimes \underbrace{B_{\triangleleft}^{-\nu_2} \mathbb{C}^{\mu}} \quad \nu_1 \geq \nu_2 = ak/2 \end{array} \right.$$

$${}^z \overline{\mathcal{J}^{\mu} \mathfrak{A} \boxtimes \mathfrak{A}} = \int_{du}^B u \Delta_u^{\nu_1-p} u \mathfrak{A} \int_{dv}^B v \Delta_v^{\nu_2-p} v \mathfrak{A} {}^z \Delta_u^{-\nu_1} {}^z \Delta_v^{-\nu_2} \zeta \mathcal{E}_{u^z-v^z}^{\mu}$$

$${}^z \overline{\mathcal{J} \mathfrak{A} \boxtimes \mathfrak{A}} = \int_{du}^B u \Delta_u^{\nu_1-p} u \mathfrak{A} \int_{dv}^B v \Delta_v^{\nu_2-p} v \mathfrak{A} {}^z \Delta_u^{-\nu_1} {}^z \Delta_v^{-\nu_2} \zeta \mathbf{e}_{u^z-v^z}$$

$${}^{z|\zeta} \mathcal{J}_{u:v}^{\mu} = {}^z \Delta_u^{-\nu_1} {}^z \Delta_v^{-\nu_2} \zeta \mathcal{E}_{u^z-v^z}^{\mu} \in Z_{\triangleleft}^{\mu} \mathbb{C}^{\mu}$$

$$\zeta \mathcal{E}_{u^z - v^z}^\mu = \zeta_{(u^g)^{z_g} - (v^g)^{z_g}}^{z_g} \mathcal{E}^\mu$$

$${}^z \mathfrak{g}_w^{-\nu} = \nu {}^z \mathfrak{g}_w^{-\nu}$$

Peirce case

$$\left\{ \begin{array}{l} \mathcal{Z} = \mathcal{Z}_c^2 \times \mathcal{Z}_c^1 \times \mathcal{Z}_c^0 \\ \mathcal{Z} = \mathcal{Z}_e^2 \times \mathcal{Z}_e^1 \end{array} \right. \begin{array}{l} \overbrace{z_2 + z_1 + z_0}^\# = z_2 - z_1 + z_0 \\ \overbrace{z_2 + z_1}^\# = z_2 - z_1 \end{array} \Rightarrow \left\{ \begin{array}{ll} \mathcal{Z}_+ = \mathcal{Z}_c^2 \times \mathcal{Z}_c^0 & \mathcal{Z}_- = \mathcal{Z}_c^1 = \mathcal{Z} \\ \mathcal{Z}_+ = \mathcal{Z}_e^2 & \mathcal{Z}_- = \mathcal{Z}_e^1 = \mathcal{Z} \end{array} \right.$$

$$\mathcal{G} = \mathbf{U} | \mathcal{B}$$

$$G = \frac{g \in \mathcal{G}}{z \# g = \# g} = \mathbf{U} | \mathcal{Z}_+ = \mathbf{U} | \mathcal{Z}$$

$$K_j = \frac{h \in K}{\underbrace{e_1 + \dots + e_j}_h = e_1 + \dots + e_j}$$

$$\mathbb{C} \times_{K_j} K = \frac{\xi \spadesuit k = h^{\chi_j} \xi \spadesuit h k}{}$$

general case

$$\sum_{\mu} {}^+ D_{\Delta_w}^2 \overbrace{-Z_{\Delta_w}^{\mu}}^{-\nu} \leftarrow \frac{\mathcal{I}}{G \text{ var}} D_{\Delta_w}^2 \overbrace{\mathbb{C} : -\zeta; +z}^{-\nu} \overline{\mathcal{I}_{\mu} \gamma} = \int_{dw}^D \zeta K_{w^z}^{\mu} w \gamma$$

$$\mathbb{G}_j Z_{\Delta_w} \mathcal{L}_j^{\ell} = \frac{S_j^{\mathbb{C}} \frac{\gamma}{\text{hol}} \mathbb{C}}{z h \gamma = h^{\chi_j z} \gamma}$$

$$s_j^{\mathbb{C}} \tilde{\gamma} \in \mathbb{G}_j Z_{\Delta_w} \mathcal{L}_j^{\ell} \leftarrow Z_{\Delta_w}^{\ell \dots \ell 0 \dots 0} \mathbb{C} \ni 1$$