



$${}^p\mathbb{K}_q \ni \Delta \mapsto 1_p : \Delta \in {}^p\mathbb{K}_{p+q}^{\mathbb{C}}$$

$${}^p\mathbb{K}_{p+q}^{\mathbb{C}} \ni x:y \mapsto \mathfrak{R} {}^p\mathbb{K}_p^{\mathbb{C}} \underline{x:y} = \mathbb{K}_p^{\mathbb{C}} \underline{x:y} = \frac{\Gamma x : \Gamma y}{\Gamma \in \mathbb{K}^p} \in \mathbb{G}_p(\mathbb{K}_{p+q})$$

$${}^p\mathbb{K}_q \ni \Delta \mapsto \mathcal{G} {}^p\mathbb{K}_p^{\mathbb{C}} \underline{1_p : \Delta} = \mathbb{K}_p^{\mathbb{C}} \underline{1_p : \Delta} = \frac{\Gamma : \Gamma \Delta}{\Gamma \in \mathbb{K}^p} \in \mathbb{G}_p(\mathbb{K}_{p+q})$$

$$\Delta : w \in {}^p\mathbb{K}_q \Rightarrow (1_p - \Delta \overset{\dagger}{w} | \Delta) \in {}^p\mathbb{K}_{p+q}^{\mathbb{C}}$$

$$(1_p - \Delta \overset{\dagger}{w} | \Delta) \asymp (1_p - u \overset{\dagger}{v} | u) \Leftrightarrow u = \underbrace{1_p - \Delta \overset{+}{w - v}}_{-1} \Delta$$

$$(1_p - \Delta \overset{\dagger}{w} | \Delta) \asymp (1_p - u \overset{\dagger}{v} | u) \Leftrightarrow \bigvee_g^{{}^p\mathbb{K}_p^{\mathbb{C}}} (1_p - u \overset{\dagger}{v} | u) = g (1_p - \Delta \overset{\dagger}{w} | \Delta) = (g - g \Delta \overset{\dagger}{w} | g \Delta) \Leftrightarrow \begin{cases} 1_p - u \overset{\dagger}{v} = g - g \Delta \overset{\dagger}{w} \\ u = g \Delta \end{cases}$$

$$\Leftrightarrow \begin{cases} 1_p - g \Delta \overset{\dagger}{v} = g - g \Delta \overset{\dagger}{w} \\ u = g \Delta \end{cases} \Leftrightarrow \begin{cases} 1_p = g \underbrace{1_p - \Delta \overset{+}{v - w}} \\ u = g \Delta \end{cases} \Leftrightarrow u = g \Delta = \underbrace{1_p - \Delta \overset{+}{w - v}}_{-1} \Delta$$