$$G = KAN \ni g = k\,\overbrace{\exp g_{\mathfrak{a}}}\,n$$

$$\mathfrak{g} = \mathfrak{k} \times \mathfrak{a} \times \mathfrak{n} \ni \gamma = \varkappa\,\overbrace{\exp \gamma_{\mathfrak{a}}^{\mathbb{C}}}\,\nu$$

$$G^{\mathbb{C}} \asymp K^{\mathbb{C}} A^{\mathbb{C}} N^{\mathbb{C}} \text{ loc}$$

$$\mathfrak{a}_{\mathbb{N}}^{+} = \frac{\mu \in \mathfrak{a}^{+}}{\bigwedge_{\alpha \in \Sigma_{+}} \dfrac{\mu|\alpha}{\alpha|\alpha} \in \mathbb{N}}$$

$$\mathfrak{h} = \mathfrak{a} \times \mathfrak{t} \underset{\text{Car}}{\sqsubset} \mathfrak{g} \Longrightarrow \mathfrak{h}^{\mathbb{C}} \underset{\text{Car}}{\sqsubset} \mathfrak{g}^{\mathbb{C}}$$

$$\lambda = \mu + \varrho$$

$$\mathfrak{t}\mu = 0 \Longrightarrow \mu^{\mathbb{C}} \in \overset{+}{\mathfrak{h}}{}^{\mathbb{C}} \text{ dominant}$$

$$\underline{U}_{\mu} \ni e_{\mu} \text{ highest weight vector}$$

$$e_{\mu}^{K} = \int_{dk}^{K} k^{\mu}\, e_{\mu} \in \underline{U}_{\mu} \begin{cases} \text{inv}^{K} \\ \text{unital} \end{cases}$$

$$s^{*} \in W^{\mathbb{C}}: \quad \underset{<}{\mathfrak{a}}\, s^{*} = -\underset{<}{\mathfrak{a}}$$

$$\mu \in \mathfrak{a}_{\mathbb{N}}^{+} \Longrightarrow \mu^{\sharp} = -s^{*}\mu \in \mathfrak{a}_{\mathbb{N}}^{+}$$

$$\underline{U}_{\mu^{\sharp}} = \underline{U}_{\mu}^{\sharp} \text{ kontragredient}$$

$$\overset{\sharp}{e}{}_{\mu}^{K} = e_{\mu^{\sharp}}^{K} \in \underline{U}_{\mu}^{\sharp}$$

$$\underset{\sim}{v} \in {}^{G^{\mathbb{C}}}\underset{\omega}{\triangle}\mathbb{C} \leftarrow \underline{U}_{\mu} \ni v: \quad {}^{\gamma}\underset{\sim}{v} = \overset{\sharp}{e}{}_{\mu}^{K}\, \underbrace{\gamma^{\mu} v}$$

$$\underset{\sim}{\gamma^{\mu} v} = \gamma \ltimes \underset{\sim}{v}$$

$${}^{\gamma}\underset{\sim}{e}_{\mu} = \overset{\sharp}{e}{}_{\mu}^{K}\, \underbrace{\gamma^{\mu} e_{\mu}} = \mathcal{E}^{\gamma_{\mathfrak{a}}^{\mathbb{C}} \mu^{\mathbb{C}}}$$

$${}^{\gamma}\underset{\sim}{e}_{\mu}^{K} = \overset{\sharp}{e}{}_{\mu}^{K}\, \underbrace{\gamma^{\mu} e_{\mu}^{K}} = \int_{dk}^{K} \mathcal{E}^{\underbrace{\gamma k}_{\mathfrak{a}}^{\mathbb{C}} \mu^{\mathbb{C}}} = \int_{dk}^{K} \mathcal{E}^{\underbrace{\gamma k}_{\mathfrak{a}}^{\mathbb{C}} \underline{\lambda - \varrho}}$$