$$ {}^{n}_{\mathsf{C}}\mathbb{K}_n = NA\,{}^{n}\mathbb{K}_n^{\mathsf{U}} $$

$$ \dot{\lrcorner} = \begin{bmatrix} {}^{1}\lrcorner \\ \cdot \\ {}^{n}\lrcorner \end{bmatrix} \text{ free } \Longrightarrow \bigvee_{\text{ONB}} \dot{\tilde{\lrcorner}} = \begin{bmatrix} {}^{1}\tilde{\lrcorner} \\ \cdot \\ {}^{n}\tilde{\lrcorner} \end{bmatrix} $$

$$ \bigwedge_{m \leqslant n} \mathbb{K} < {}^{1}\lrcorner \cdots {}^{m}\lrcorner > = \mathbb{K} < {}^{1}\tilde{\lrcorner} \cdots {}^{m}\tilde{\lrcorner} > $$

$$ \text{Ind } {}^{j}\acute{\lrcorner} = {}^{j}\lrcorner - \sum_{i<j} {}^{j}\lrcorner \blacktriangleright {}^{i}\tilde{\lrcorner}\ {}^{i}\tilde{\lrcorner} \neq 0 $$

$$ {}^{j}\tilde{\lrcorner} = \underline{{}^{j}\acute{\lrcorner}} = {}^{j}\acute{\lrcorner} \,/\, \overline{{}^{j}\acute{\lrcorner}} $$

$$ \Longrightarrow {}^{j}\acute{\lrcorner} \blacktriangleright {}^{j}\tilde{\lrcorner} = {}^{j}\lrcorner \blacktriangleright {}^{i}\tilde{\lrcorner} - {}^{j}\lrcorner \blacktriangleright {}^{i}\tilde{\lrcorner} = 0 = {}^{j}\tilde{\lrcorner} \blacktriangleright {}^{i}\tilde{\lrcorner} \Longrightarrow {}^{1}\tilde{\lrcorner} \cdots {}^{n}\tilde{\lrcorner} \text{ ONB} $$

$$ \Longrightarrow \bigvee \text{ ONB of } \Gamma $$

$$ {}^{n}_{\mathsf{C}}\mathbb{K}_n \ni \dot{\lrcorner}_{\cdot} = T\Lambda\, \dot{\tilde{\lrcorner}}_{\cdot} \in NA\,{}^{n}\mathbb{K}_n^{\mathsf{U}} $$

$$ \dot{\lrcorner}_{\cdot}\ \dot{\tilde{\lrcorner}}_{\cdot}^{*} = \begin{bmatrix} {}^{1}\lrcorner \\ \cdot \\ {}^{n}\lrcorner \end{bmatrix} \begin{bmatrix} {}^{1}\tilde{\lrcorner}^{*} & \cdot & {}^{n}\tilde{\lrcorner}^{*} \end{bmatrix} = \begin{bmatrix} {}^{1}\lrcorner \blacktriangleright {}^{1}\tilde{\lrcorner} & \cdot & {}^{1}\lrcorner \blacktriangleright {}^{n}\tilde{\lrcorner} \\ \cdot & \cdot & \cdot \\ {}^{n}\lrcorner \blacktriangleright {}^{1}\tilde{\lrcorner} & \cdot & {}^{n}\lrcorner \blacktriangleright {}^{n}\tilde{\lrcorner} \end{bmatrix} = \begin{bmatrix} {}^{1}\lrcorner \blacktriangleright {}^{1}\tilde{\lrcorner} & 0 & & 0 & 0 \\ {}^{2}\lrcorner \blacktriangleright {}^{1}\tilde{\lrcorner} & {}^{2}\lrcorner \blacktriangleright {}^{2}\tilde{\lrcorner} & & 0 & 0 \\ \cdot & \cdot & \cdot & & 0 \\ {}^{n}\lrcorner \blacktriangleright {}^{1}\tilde{\lrcorner} & {}^{n}\lrcorner \blacktriangleright {}^{2}\tilde{\lrcorner} & \cdot & {}^{n}\lrcorner \blacktriangleright {}^{n}\tilde{\lrcorner} \end{bmatrix} $$

$$ = \begin{bmatrix} {}^{1}\lrcorner_1 & 0 & 0 & 0 \\ {}^{2}\lrcorner_1 & {}^{2}\lrcorner_2 & 0 & 0 \\ \cdot & \cdot & \cdot & 0 \\ {}^{n}\lrcorner_1 & {}^{n}\lrcorner_2 & \cdot & {}^{n}\lrcorner_n \end{bmatrix} = \begin{bmatrix} 1 & 0 & & \\ \frac{{}^{2}\lrcorner_1}{{}^{1}\lrcorner_1} & 1 & 0 & 0 \\ \cdot & \cdot & \cdot & 0 \\ \frac{{}^{n}\lrcorner_1}{{}^{1}\lrcorner_1} & \frac{{}^{n}\lrcorner_2}{{}^{2}\lrcorner_2} & \frac{{}^{n}\lrcorner_{n-}}{{}^{n-}\lrcorner_{n-}} & 1 \end{bmatrix} \begin{bmatrix} {}^{1}\lrcorner_1 & 0 & 0 & 0 \\ 0 & {}^{2}\lrcorner_2 & 0 & 0 \\ 0 & 0 & {}^{n-}\lrcorner_{n-} & 0 \\ 0 & 0 & 0 & {}^{n}\lrcorner_n \end{bmatrix} $$