

$$t^U = \sum_{U \subseteq V} l^V \xrightleftharpoons[\text{Moeb inv}]{\text{Spalten}} l^U = \sum_{U \subseteq V} U^{-1V} t^V$$

$$\# \frac{l \in \mathbb{K}^n \triangle X}{\ker l = U} = \sum_{U \subseteq V} U^{-1V} |X|^{n - \dim V}$$

$$U \subseteq \mathbb{K}^n$$

$$l^U(x) = \# \frac{l \in \mathbb{K}^n \triangle X}{\ker l = U}$$

$$\sum_{U \subseteq V} l^U = \sum_{U \subseteq V} \# \frac{l \in \mathbb{K}^n \triangle X}{\ker l = V} = \# \frac{l \in \mathbb{K}^n \triangle X}{\ker l \supseteq U} = \# \frac{l \in \mathbb{K}^n \triangle X}{\vec{l} = 0}$$

$$= \# \mathbb{K}^n \setminus U \triangle X = \# \text{Basis von } \mathbb{K}^n \setminus U \triangle X = |X|^{\text{Basis}} = x^{n - \dim U}$$

$$\xrightarrow[\text{Moeb inv}]{\text{Spalten}} \# \frac{l \in \mathbb{K}^n \triangle X}{\ker l = U} = l^U = \sum_{U \subseteq V} U^{-1V} x^{n - \dim V}$$