

$$\left\{ \begin{array}{l} \text{symm } \mathbb{K}^n \triangleleft_{\hat{\cdot}} \mathbb{K} \ni t^1 \cdots t^n \gamma \\ 0t^2 \cdots t^n \gamma = 0 \end{array} \right\} \Rightarrow \left\{ \begin{array}{l} \bigvee_{\text{symm}} \mathbb{K}^n \triangleleft_{\hat{\cdot}} \mathbb{K} \ni t \gamma \\ t^1 \cdots t^n \gamma = t^1 \cdots t^n \underbrace{\gamma}_{t^1 \cdots t^n} \end{array} \right.$$

$$\text{elementary } \prod_{i \geq 1} \overline{1 + tx_i} = \sum_{m \geq 0} t^m x_m e$$

$${}_j e = \sigma_j$$

$$\mu = \mu_1 \mu_2 \cdots \mu_n$$

$$\varepsilon = 123 \cdots n$$

$$\mu \hat{\varepsilon} = \mu_1 + 2\mu_2 + 3\mu_3 + \cdots + n\mu_n$$

$${}^t\gamma = \sum_{\mu^{\xi} \leq d} {}^t_1 e^{\mu_1} \cdots {}^t_n e^{\mu_n} \mu \uparrow$$

$$t = t^1 \cdots t^n = t' t^n$$

$$\mu' = \mu_1 \mu_2 \cdots \mu_{n-1}$$

$$\varepsilon' = 123 \cdots n - 1$$

$$t' \text{ symm } {}^{t^0}\gamma = \sum_{\mu'^{\xi'} \leq d} {}^{t^0}_1 e^{\mu_1} \cdots {}^{t^0}_{n-1} e^{\mu_{n-1}} \mu \uparrow$$

$$t \text{ symm } {}^t\gamma = \sum_{\mu'^{\xi'} \leq d} {}^t_1 e^{\mu_1} \cdots {}^t_{n-1} e^{\mu_{n-1}} \mu \uparrow$$

$$\deg {}^t_1 e^{\mu_1} \cdots {}^t_{n-1} e^{\mu_{n-1}} = \mu'^{\xi'} \leq d$$

$${}^{t^0}\gamma - \sum_{\mu'^{\xi'} \leq d} {}^{t^0}_1 e^{\mu_1} \cdots {}^{t^0}_{n-1} e^{\mu_{n-1}} \mu \uparrow = {}^{t^0}\gamma - \sum_{\mu'^{\xi'} \leq d} {}^{t^0}_1 e^{\mu_1} \cdots {}^{t^0}_{n-1} e^{\mu_{n-1}} \mu \uparrow = 0$$

$$\stackrel{\text{Lem}}{\Rightarrow} {}^t\gamma - \sum_{\mu'^{\xi'} \leq d} {}^t_1 e^{\mu_1} \cdots {}^t_{n-1} e^{\mu_{n-1}} \mu \uparrow = \underbrace{t^1 \cdots t^n}_2 \text{ symm } = {}^t_n e {}^t\gamma$$

$$\deg {}^t\gamma \leq d - n \stackrel{\text{ind}}{\Rightarrow} {}^t\gamma = \sum_{\mu^{\xi} \leq d-n} {}^t_1 e^{\mu_1} \cdots {}^t_n e^{\mu_n} \mu \uparrow$$

$$\Rightarrow {}^t\gamma = \sum_{\mu'^{\xi'} \leq d} {}^t_1 e^{\mu_1} \cdots {}^t_{n-1} e^{\mu_{n-1}} \mu \uparrow + \sum_{\mu^{\xi} \leq d-n} {}^t_1 e^{\mu_1} \cdots {}^t_n e^{1+\mu_n} \mu \uparrow$$

$$\mu_1 + 2\mu_2 + \cdots + n \underbrace{1+\mu_n}_{\leq d-n+n} \leq d - n + n = d$$

$$\text{homogeneous } \prod_{i \geq 1} \overbrace{1 - tx_i}^{-1} = \sum_{m \geq 0} t^m {}^x_m h$$

$$\prod_{i \geq 1} \overbrace{1 - tx_i}^{-k} = \sum_{m \geq 0} t^{mk} {}^{x^k}_m h$$

$$\text{power } {}^x p_m = \sum_{i \geq 1} x_i^m$$

$$\sum_{m \geq 0} t^m \frac{x^m}{m!} = \sum_{m \geq 0} t^m \sum_{i \geq 1} x_i^m = \sum_{m \geq 0} \sum_{i \geq 1} \widehat{tx_i}^m = \sum_{i \geq 1} \sum_{m \geq 0} \widehat{tx_i}^m = \sum_{i \geq 1} \overline{1 - tx_i}^{-1}$$