

$$\mathbb{J} = \mathbb{J}_0 \times \mathbb{J}_1 \in \triangleleft \mathbb{K} \text{ sAlg} : \Leftrightarrow \begin{cases} \mathbb{J} = \mathbb{J}_0 \times \mathbb{J}_1 \in \triangleleft \mathbb{K} \text{ sVR} \\ \mathbb{J} \in \triangleleft \mathbb{K} \text{ ass Alg} \\ \mathbb{J}_p \times \mathbb{J}_q \subset \mathbb{J}_{p+q} \end{cases}$$

$$\mathbb{J}_0 \times \mathbb{J}_0 \subset \mathbb{J}_0 \supset \mathbb{J}_1 \times \mathbb{J}_1$$

$$\mathbb{J}_0 \times \mathbb{J}_1 \subset \mathbb{J}_1 \supset \mathbb{J}_1 \times \mathbb{J}_0$$

$$\mathbb{J} \in \triangleleft \mathbb{K} \text{ sAlg} \Rightarrow \mathbb{J} \otimes \mathbb{J} \text{ sAlg grad tensor product}$$

$$\underline{\mathbb{J}} \otimes \underline{\mathbb{J}} = \begin{matrix} | & \mathbb{J} & | \\ -1 & & 1 \\ | & \mathbb{J} & | \end{matrix}$$

$$\underline{\mathbb{K}} \otimes = \underline{\mathbb{K}}_0 \otimes \underline{\mathbb{K}}_1 \text{ sAlg}$$

$$\Rightarrow \underline{\mathbb{K}} \otimes \Lambda = \underline{\mathbb{K}}_0 \otimes \Lambda_0 \otimes \underline{\mathbb{K}}_1 \otimes \Lambda_1 : \otimes \text{ ungraded Alg}$$

$$\underline{\mathbb{K}}_0 \otimes \lambda_0 + \underline{\mathbb{K}}_1 \otimes \lambda_1 \otimes \underline{\mathbb{K}}_0 \otimes \lambda_0 + \underline{\mathbb{K}}_1 \otimes \lambda_1 =$$

$$\underline{\mathbb{K}}_0 \otimes \underline{\mathbb{K}}_0 \otimes \lambda_0 \otimes \lambda_0 + \underline{\mathbb{K}}_0 \otimes \underline{\mathbb{K}}_1 \otimes \lambda_0 \otimes \lambda_1 + \underline{\mathbb{K}}_1 \otimes \underline{\mathbb{K}}_0 \otimes \lambda_1 \otimes \lambda_0 - \underline{\mathbb{K}}_1 \otimes \underline{\mathbb{K}}_1 \otimes \lambda_1 \otimes \lambda_1$$

$$\underline{\mathbb{K}} \otimes \text{sGel} \Leftrightarrow \underline{\mathbb{K}} \otimes \Lambda \otimes \text{Gel}$$