

$$\begin{array}{ccc}
 K[x_0] \times \cdots \times K[x_\ell] & \xrightarrow{\quad} & K[x_0] \otimes \cdots \otimes K[x_\ell] \\
 \downarrow \rho_0 & & \downarrow \rho_0 \otimes \cdots \otimes \rho_\ell \\
 \text{End}(V_0) \times \cdots \times \text{End}(V_\ell) & \xrightarrow{\quad} & \text{End}(V_0) \otimes \cdots \otimes \text{End}(V_\ell)
 \end{array}$$

$\rho_\ell$

$$\begin{array}{ccc}
 K[x_0] \times \cdots \times K[x_\ell] & \xrightarrow{\quad} & K[x_0] \otimes \cdots \otimes K[x_\ell] \\
 \downarrow \rho_0 & & \downarrow \cong \\
 & & K[x_0, \dots, x_\ell] \\
 & & \downarrow \rho \\
 \text{End}(V_0) \times \cdots \times \text{End}(V_\ell) & \xrightarrow{\quad} & \text{End}(V_0) \otimes \cdots \otimes \text{End}(V_\ell) \\
 & & \downarrow \\
 & & \text{End}(V_0 \oslash \cdots \oslash V_\ell)
 \end{array}$$