

$$\begin{array}{ccc}
 C & \xrightarrow{\Delta} & C \times C \\
 \downarrow \Delta & & \downarrow \Delta \times 1_C \\
 C \times C & \xrightarrow{1_C \otimes \Delta} & C \times C \times C
 \end{array}$$

$$\begin{array}{ccccc}
 T \times C & \xleftarrow{\varepsilon \times 1_C} & C \times C & \xrightarrow{1_C \times \varepsilon} & C \times T \\
 & \swarrow \sigma' & \uparrow \Delta & \nearrow \sigma & \\
 & & C & &
 \end{array}$$