

$$\begin{array}{ccccccc}
 \cdots & \longrightarrow & C_q(A) & \xrightarrow{\partial_q} & C_{q-1}(A) & \longrightarrow & \cdots \\
 & & \downarrow \text{in} & & \downarrow \text{in} & & \\
 \cdots & \longrightarrow & C_q(X) & \xrightarrow{\partial_q} & C_{q-1}(A) & \longrightarrow & \cdots
 \end{array}$$