

$$\begin{array}{ccccc}
 C_q(X) & \xrightarrow{\partial_q} & C_{q-1}(X) & \xrightarrow{\pi_{q-1}} & C_{q-1}(X)/C_{q-1}(A) \\
 & \searrow \pi_q & & \nearrow \exists! \delta_q & \\
 & & C_q(X)/C_q(A) & &
 \end{array}$$