

$$\begin{array}{ccc}
[X, K(G, n)]_* & \xleftarrow{\varphi^*} & [K(G, n), K(G, n)]_* \\
T_X \downarrow \cong & & \cong \downarrow T_{K(G, n)} \\
\tilde{H}^n(X; G) & \xleftarrow{\varphi^*} & \tilde{H}^n(K(G, n); G)
\end{array}$$