

$$\begin{array}{ccc}
M & \xrightarrow{q} & Q \\
\parallel & & \downarrow \\
M & \xrightarrow{\tilde{p}} & \tilde{P} \\
\parallel & & \downarrow \\
M & \xrightarrow{p} & P
\end{array}$$

$$\begin{array}{ccccccc}
M & \hookrightarrow^j & X & \longrightarrow & C_0 \\
\parallel & & \downarrow & & \downarrow \\
M & \hookrightarrow^{\tilde{i}} & \tilde{F} & \longrightarrow & C_2 \\
\parallel & & \downarrow & & \downarrow \\
M & \hookrightarrow^i & F & \longrightarrow & C_3
\end{array}$$