

$$\begin{array}{ccccc}
 M & \longrightarrow & N & \longrightarrow & \operatorname{coker} \phi \\
 & \searrow & \downarrow & \nearrow & \\
 & 0 & \psi & \exists! \tilde{\psi} & \\
 & & M' & &
 \end{array}$$