

$$\begin{array}{ccccccc}
 0 & \longrightarrow & A_1 & \begin{array}{c} \xrightarrow{\iota_1} \\ \xleftarrow{\pi_1} \end{array} & B & \begin{array}{c} \xrightarrow{\pi_2} \\ \xleftarrow{\iota_2} \end{array} & A_2 \longrightarrow 0 \\
 & & \downarrow \mathbf{1}_{A_1} & & \downarrow \varphi & & \downarrow \mathbf{1}_{A_2} \\
 0 & \longrightarrow & A_1 & \xrightarrow{f} & B & \xrightarrow{g} & A_2 \longrightarrow 0
 \end{array}$$