



$$\begin{array}{ccccccc} 0 & \longrightarrow & A_n & \xrightarrow{\iota} & B_n & \xrightarrow{\pi} & C_n \longrightarrow 0 \\ & & \downarrow d & & \downarrow d & & \downarrow d \\ 0 & \longrightarrow & A_{n-1} & \xrightarrow{\iota} & B_{n-1} & \xrightarrow{\pi} & C_{n-1} \longrightarrow 0 \end{array}$$