

$$\begin{array}{ccccccccc}
0 & \longrightarrow & K & \xrightarrow{i} & P & \xrightarrow{p} & S & \longrightarrow & 0 \\
& & \downarrow g' & & \vdots & & \parallel & & \\
0 & \longrightarrow & M_\beta & \xrightarrow{f_\beta} & M_{\beta+1} & \longrightarrow & S & \longrightarrow & 0 \\
& \nearrow & & \searrow & & & & & \\
& & M_\alpha & & & & & &
\end{array}$$