

$$\begin{array}{ccccc}
 \text{Ker}(\varphi - \psi) & \xrightarrow{e} & G & \begin{array}{c} \xrightarrow{\psi} \\ \xleftarrow{\varphi} \end{array} & H \\
 \uparrow u & & \nearrow \sigma & & \\
 K & & & &
 \end{array}$$