

$$\begin{array}{ccccc}
 \Omega(A) & \hookrightarrow & P_A & \twoheadrightarrow & A \\
 \downarrow 0 & & \downarrow \theta \circ (f-g)_1 \circ \pi_A & & \downarrow (f-g)_1 \\
 & & & & P \\
 & & & \nearrow \theta & \downarrow (f-g)_2 \\
 \Omega(B) & \hookrightarrow & P_B & \twoheadrightarrow & B
 \end{array}
 \quad
 \begin{array}{c}
 \curvearrowright \\
 f-g
 \end{array}$$