

$$\begin{array}{ccccc}
 \pi(\mathcal{C} \cap \mathcal{F}) & \xrightarrow{\quad} & \pi\mathcal{F} & & \\
 \downarrow & \nwarrow & \uparrow & \searrow \overline{\gamma_{\mathcal{F}}} & \\
 & \mathcal{C} \cap \mathcal{F} & \xrightarrow{\quad} & \mathcal{F} & \longrightarrow \mathrm{Ho}(\mathcal{F}) \\
 & \downarrow & \swarrow & \downarrow & \downarrow \\
 \pi\mathcal{C} & \xleftarrow{\quad} & \mathcal{C} & \xrightarrow{\quad} & \mathcal{A} \\
 & \searrow \overline{\gamma_{\mathcal{C}}} & \downarrow & \searrow & \\
 & & \mathrm{Ho}(\mathcal{C}) & \dashrightarrow & \mathrm{Ho}(\mathcal{A})
 \end{array}$$

$\overline{\gamma}$