

$$\begin{array}{ccccc}
 & & \pi_1(U_1) & \xrightarrow{j_1} & \\
 i_1 \nearrow & & \searrow & \nearrow & \\
 \pi_1(U_1 \cap U_2) & & \pi_1(U_1) *_{\pi_1(U_1 \cap U_2)} \pi_1(U_2) & \xrightarrow{\cong} & \pi_1(X) \\
 i_2 \searrow & \nearrow & & \nwarrow & \\
 & \pi_1(U_2) & \xrightarrow{j_2} & &
 \end{array}$$