

$$\begin{array}{ccccc}
& \mathbb{Z}/m\mathbb{Z} & & & \\
& \parallel & & & \\
H^2(\mathrm{Gal}(K_m/K), K_m^*) & \xrightarrow{\quad .0 \quad} & H^2(\mathrm{Gal}(K_m L/L), (K_m L)^*) & & \\
& \searrow \scriptstyle \mathrm{inf}_1 & & \nearrow \scriptstyle \mathrm{res} & \\
& H^2(\mathrm{Gal}(K_m L/K), (K_m L)^*) & & & \\
& \nearrow \scriptstyle \mathrm{inf}_2 & & & \\
& H^2(\mathrm{Gal}(L/K), L^*) & & & \\
0 & \nearrow & & &
\end{array}$$