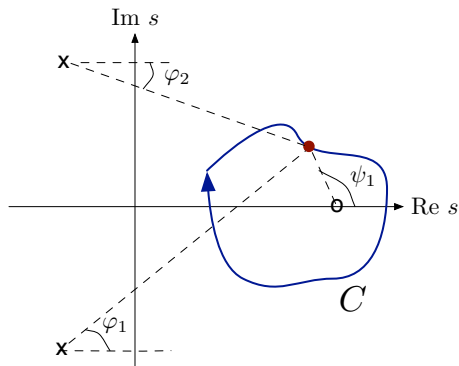


## Case 1: Contour Encircles a Zero

Suppose that  $C$  is a closed,  $\circlearrowleft$ -oriented contour in  $\mathbb{C}$  that encircles a **zero** of  $H(s)$ :



How does  $\angle H(s)$  change as we go around  $C$ ?