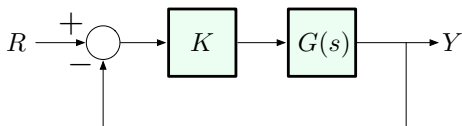


From Argument Principle to Nyquist Criterion



We now examine the Nyquist plot of $H(s) = 1 + KG(s)$.

By the argument principle,

$$N = Z - P,$$

where $N = \#(\circlearrowright \text{ encirclements of } 0$

by Nyquist plot of $1 + KG(s)$),

$Z = \#(\text{zeros of } 1 + KG(s) \text{ inside } C)$,

$P = \#(\text{poles of } 1 + KG(s) \text{ inside } C)$

Now we extract information about RHP roots of $1 + KG(s)$