

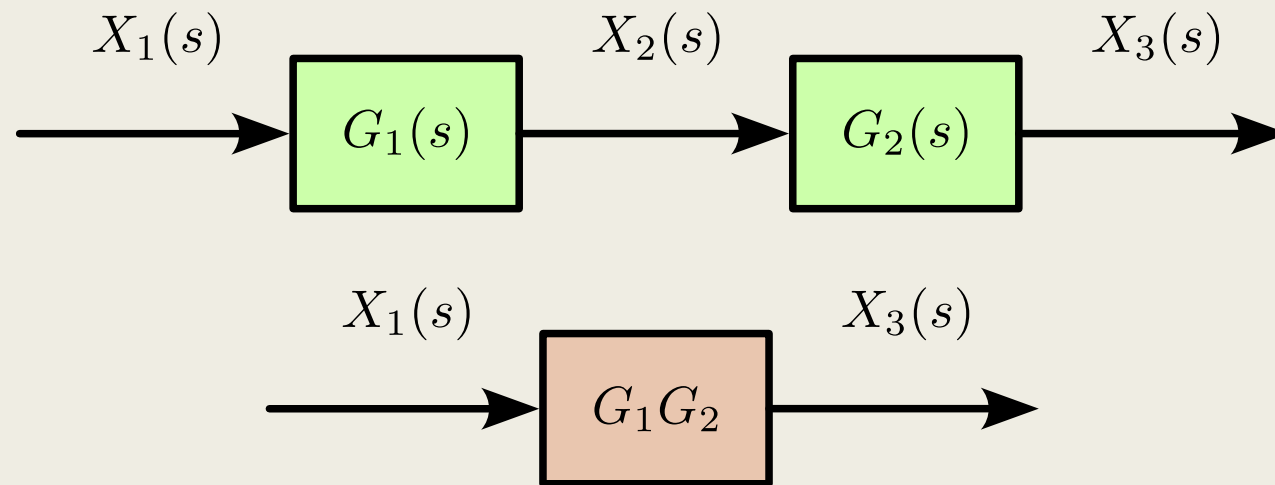


DIAGRAMAS DE BLOQUE

SCyA IC 2026 - JGR

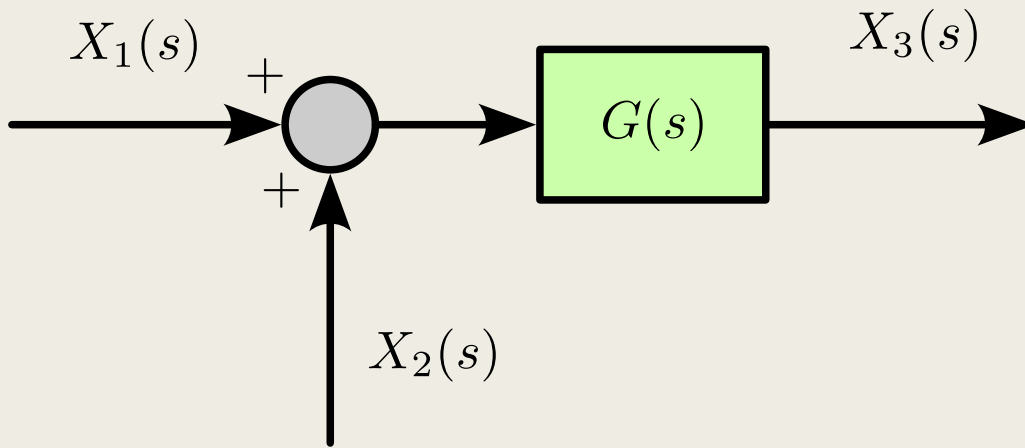


Bloques en cascada

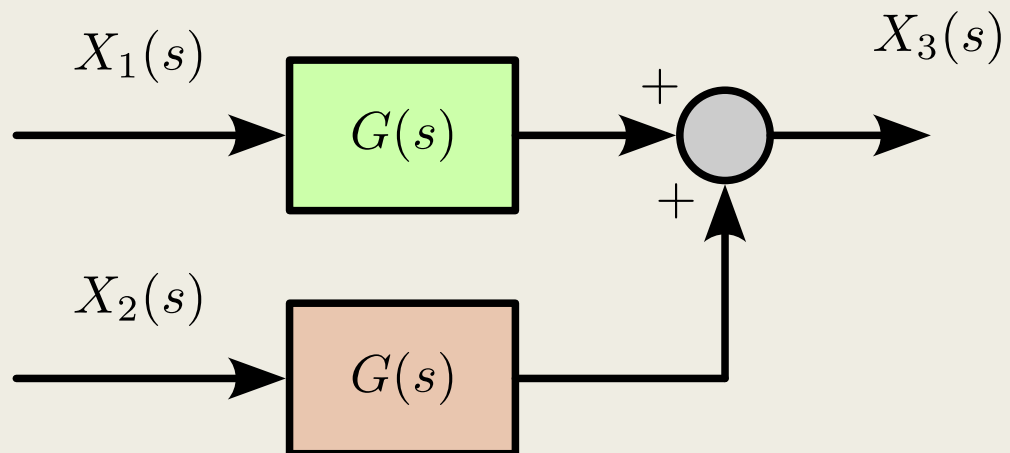


$$X_3(s) = G_1(s)G_2(s)X_1(s)$$

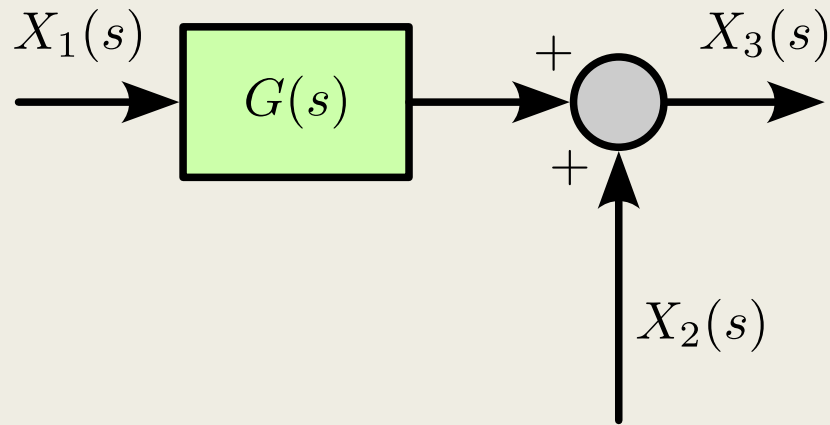
Mover sumador hacia adelante



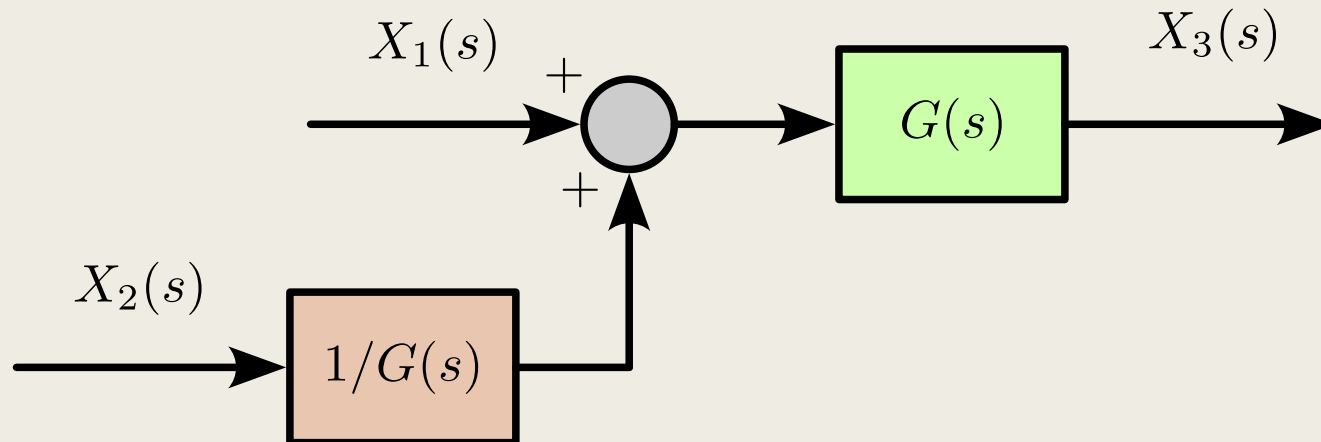
$$X_3 = GX_1 + GX_2$$



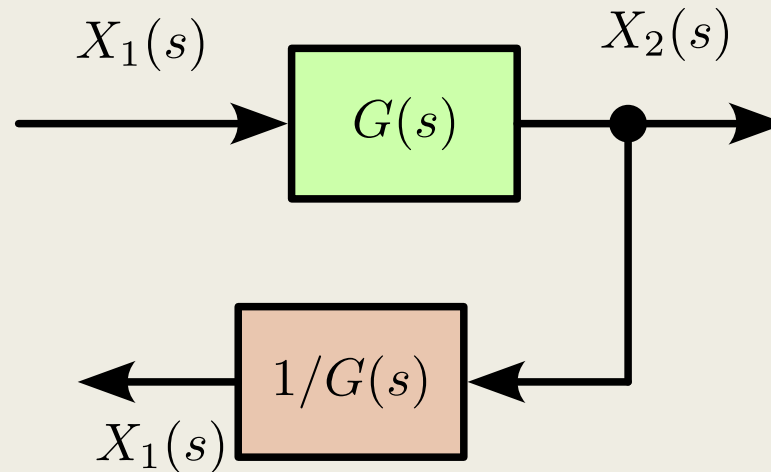
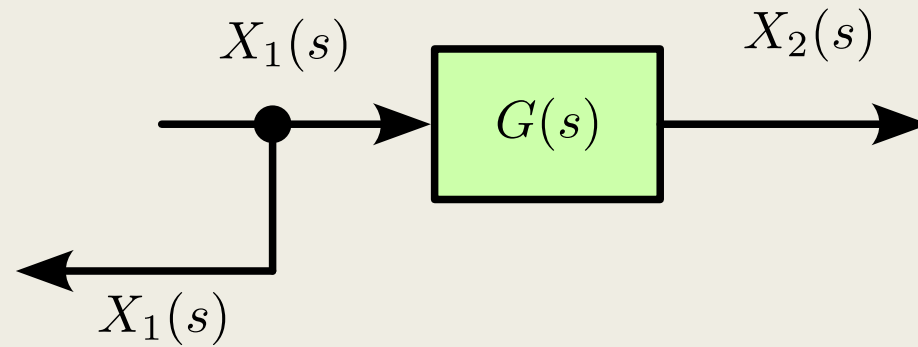
Mover sumador hacia atrás



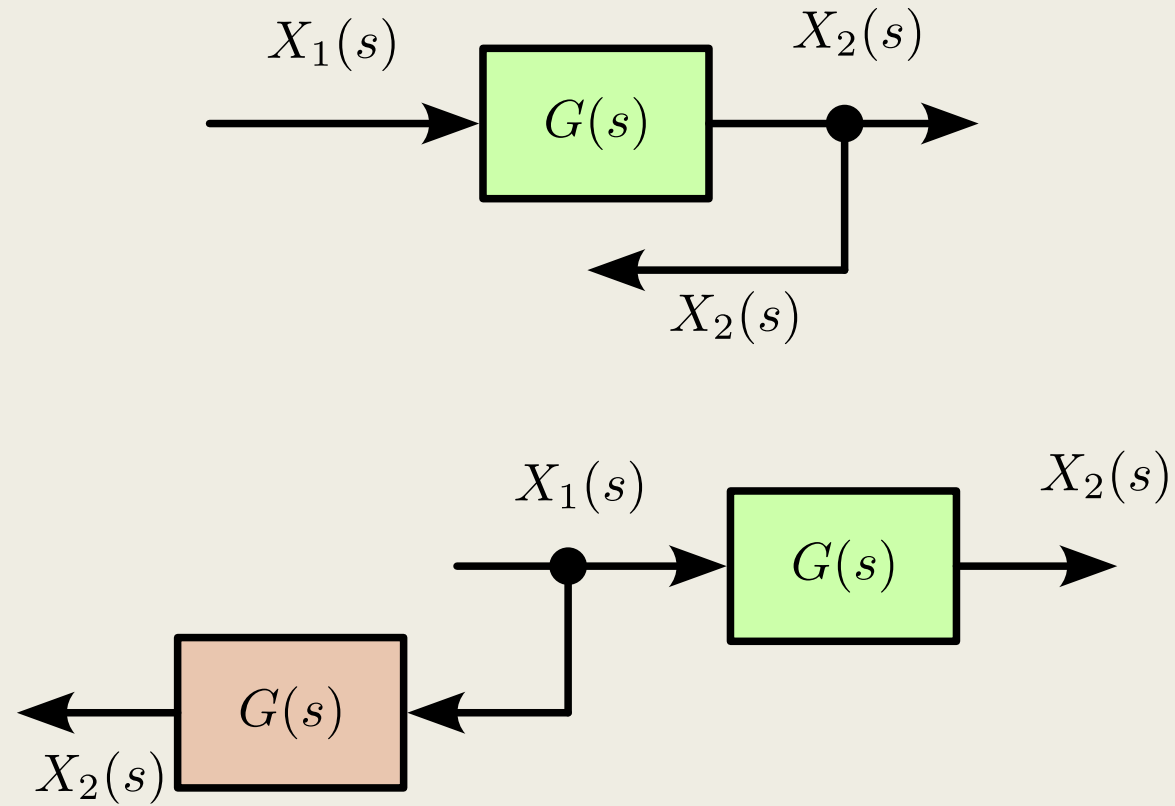
$$X_3 = GX_1 + X_2$$



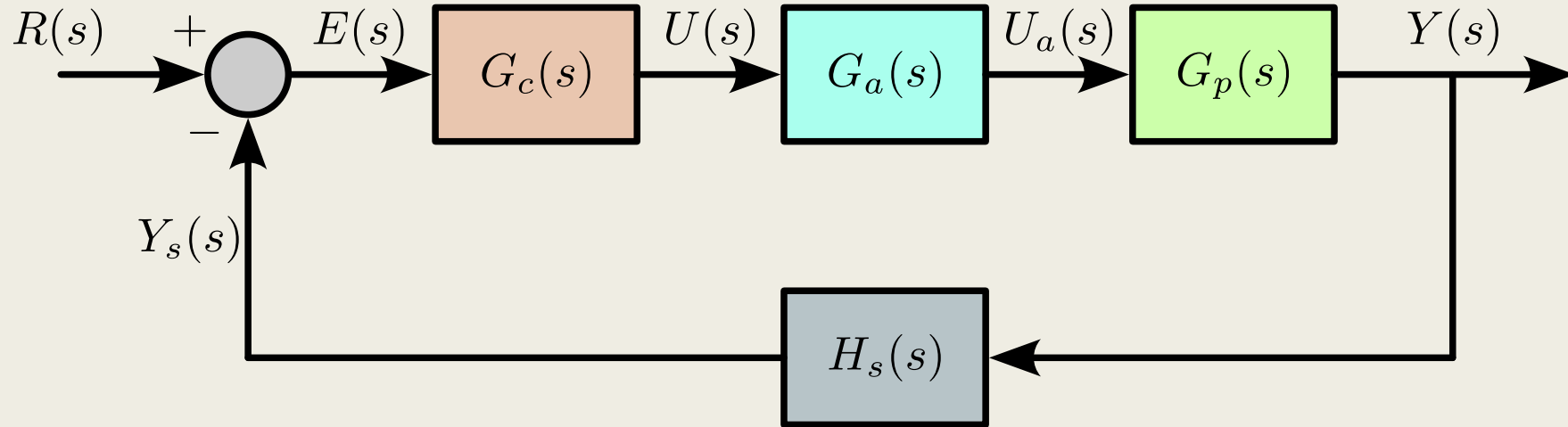
Mover derivación hacia adelante



Mover derivación hacia atrás

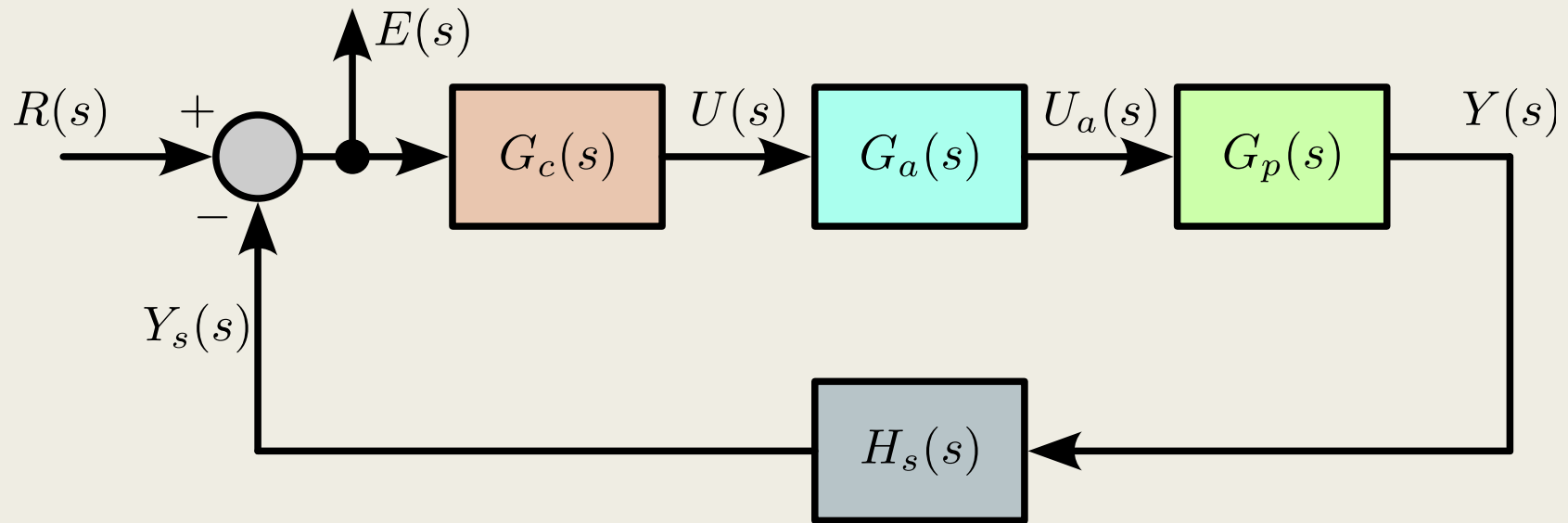


Sistema a lazo cerrado



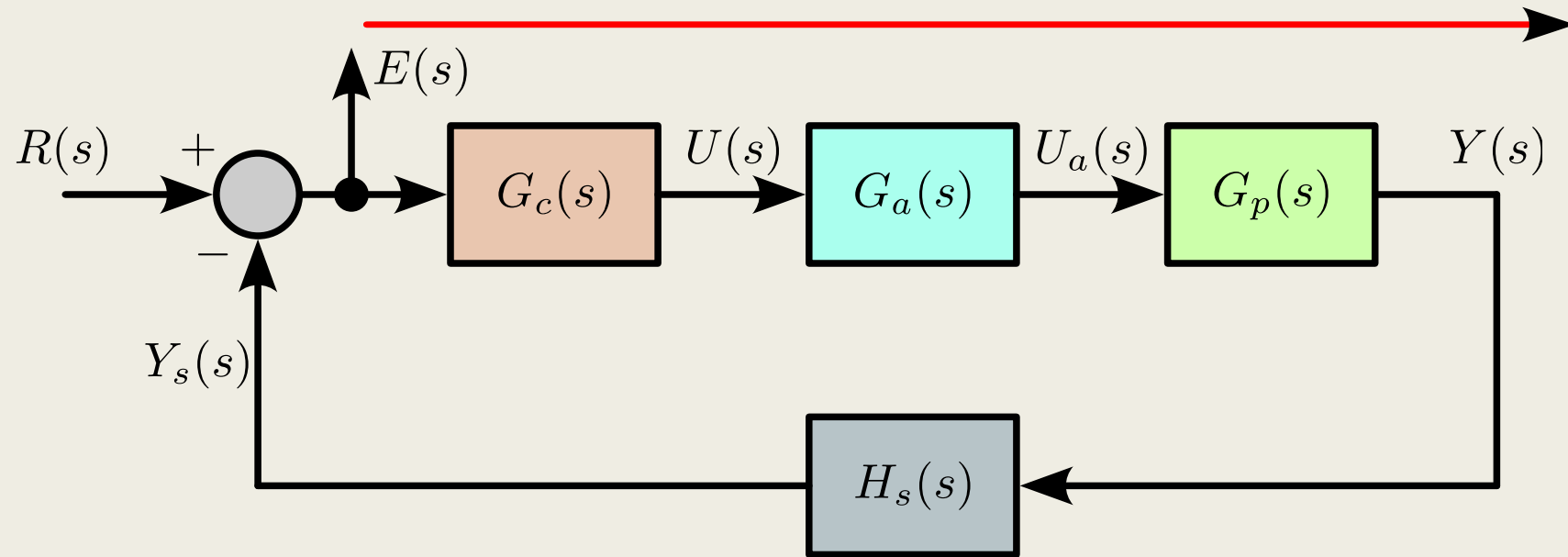
$$G_{LC}(s) = \frac{Y(s)}{R(s)} = \frac{G_c(s)G_a(s)G_p(s)}{1 + H_s(s)G_c(s)G_a(s)G_p(s)}$$

Respuesta de variables intermedias



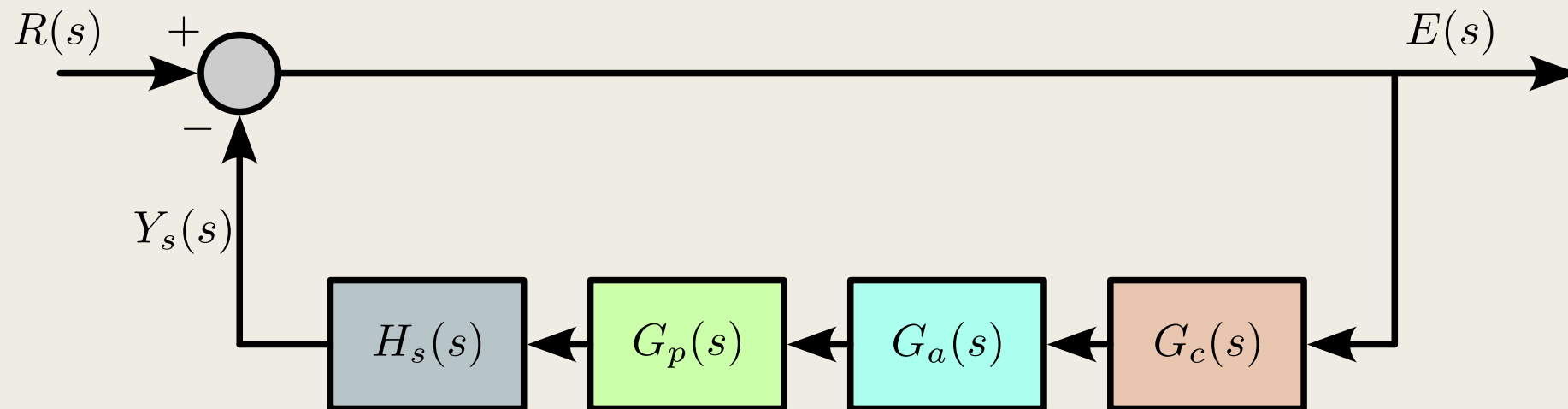
$$G_E(s) = \frac{E(s)}{R(s)} = ?$$

Respuesta de variables intermedias



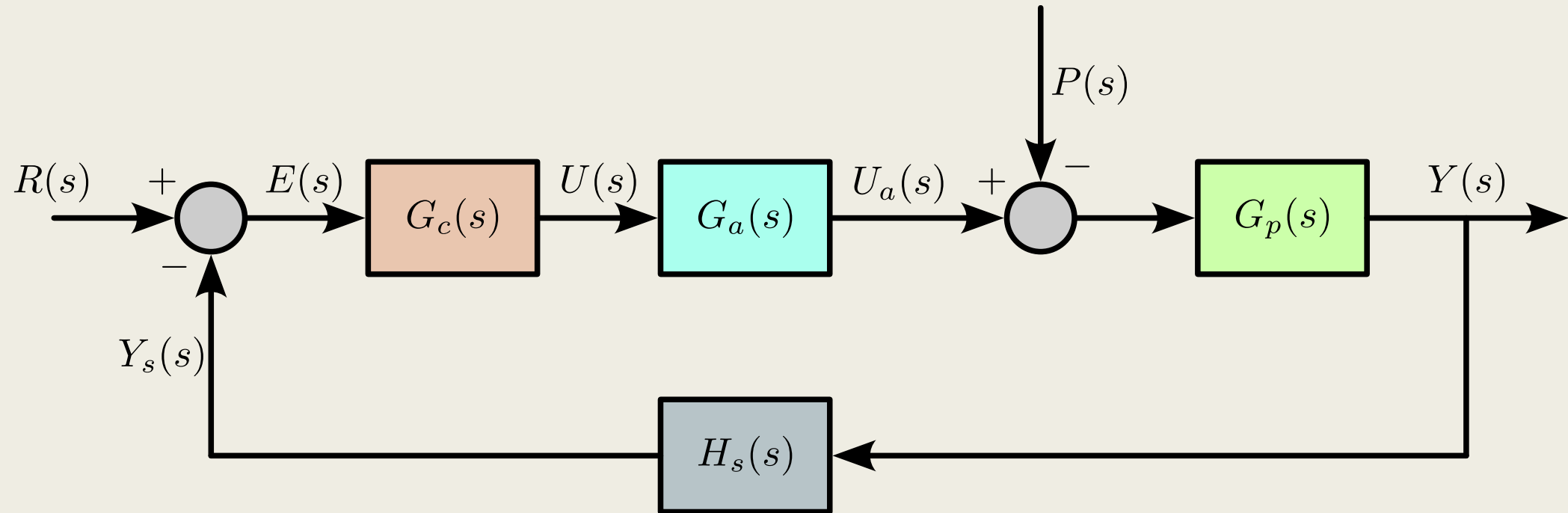
$$G_E(s) = \frac{E(s)}{R(s)} = ?$$

Respuesta de variables intermedias



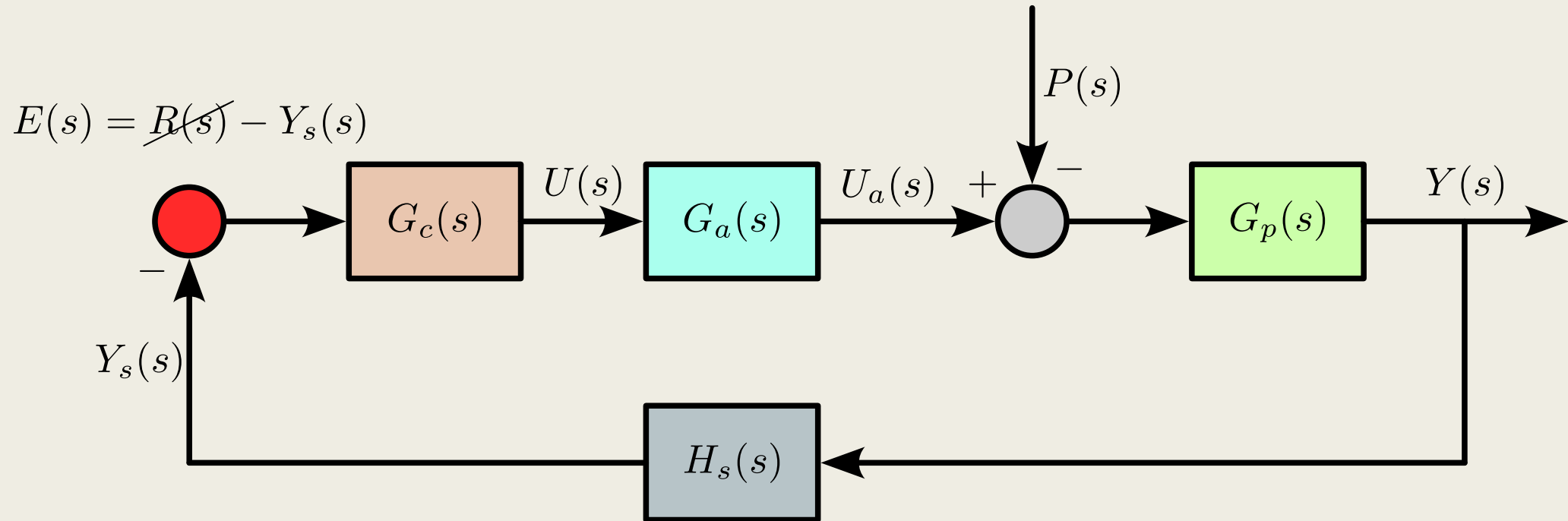
$$G_E(s) = \frac{E(s)}{R(s)} = \frac{1}{1 + H_s(s)G_c(s)G_a(s)G_p(s)}$$

Respuesta a otras entradas



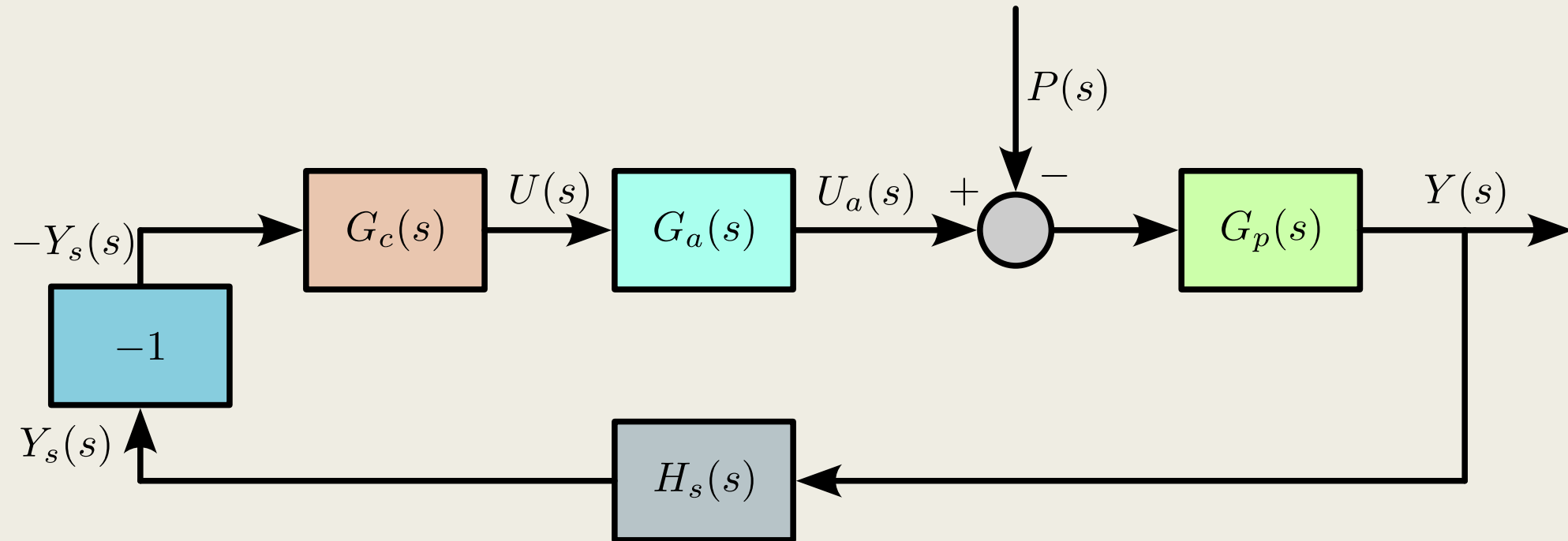
$$G_{PER}(s) = \frac{Y(s)}{P(s)} = ?$$

Respuesta a otras entradas



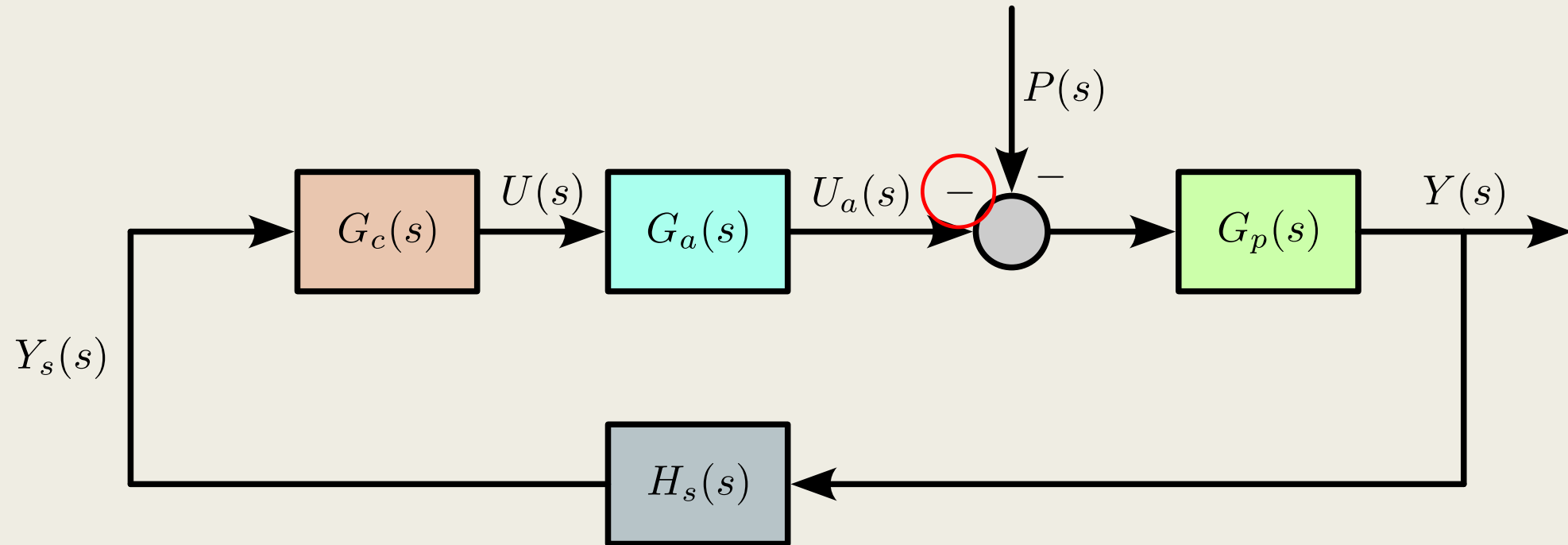
$$G_{PER}(s) = \frac{Y(s)}{P(s)} = ?$$

Respuesta a otras entradas



$$G_{PER}(s) = \frac{Y(s)}{P(s)} = ?$$

Respuesta a otras entradas



$$G_{PER}(s) = \frac{Y(s)}{P(s)} = - \frac{G_p(s)}{1 + H_s(s)G_c(s)G_a(s)G_p(s)}$$