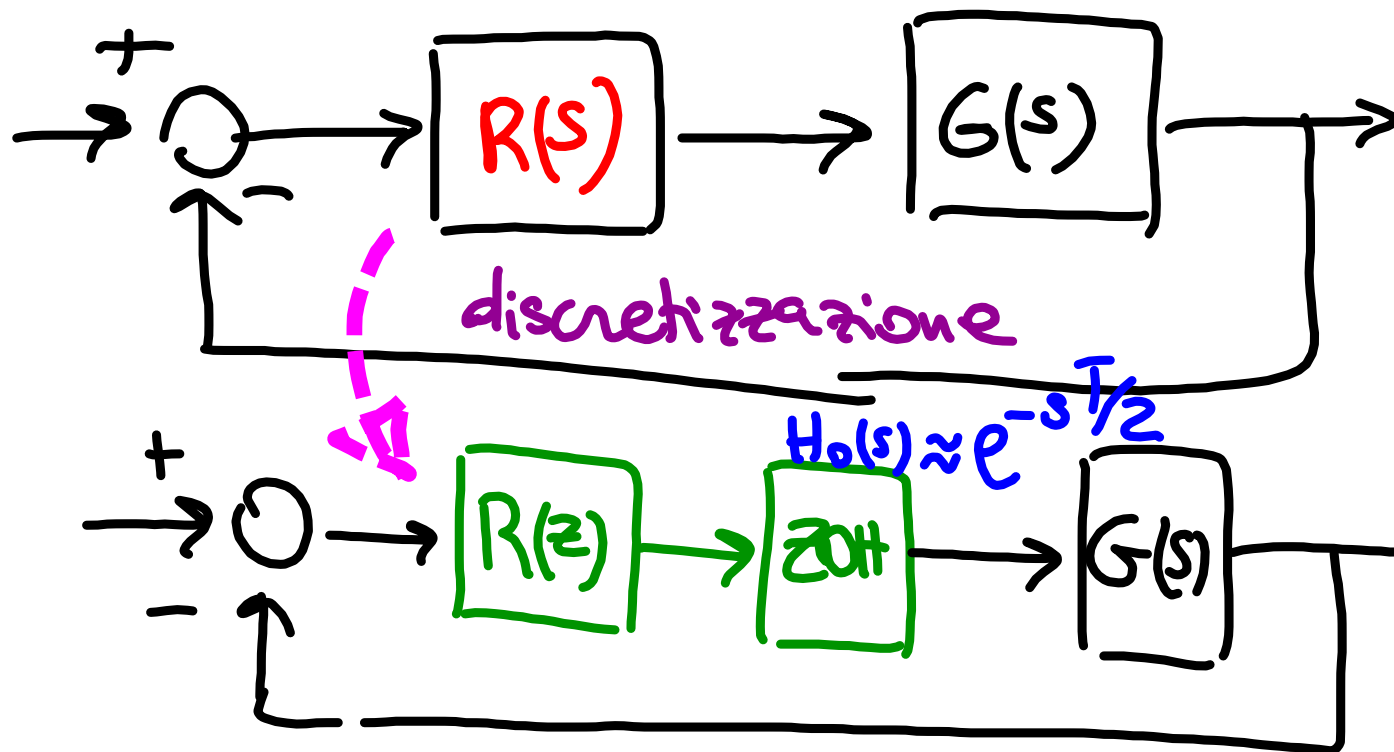


## Metodo Indiretto



Forma 'costanti di tempo'

$$\left. \begin{array}{l} \tau_z = 1/s_z \\ \tau_p = 1/s_p \end{array} \right\} R(s) = K \frac{1 + s/s_z}{1 + s/s_p} =$$

statica

$$= \boxed{K} \frac{1 + \tau_z \cdot s}{1 + \tau_p \cdot s} \text{ din.}$$

$$G(0) = K$$

- 1) EA
- 2) EI
- 3) TU
- 4) HE

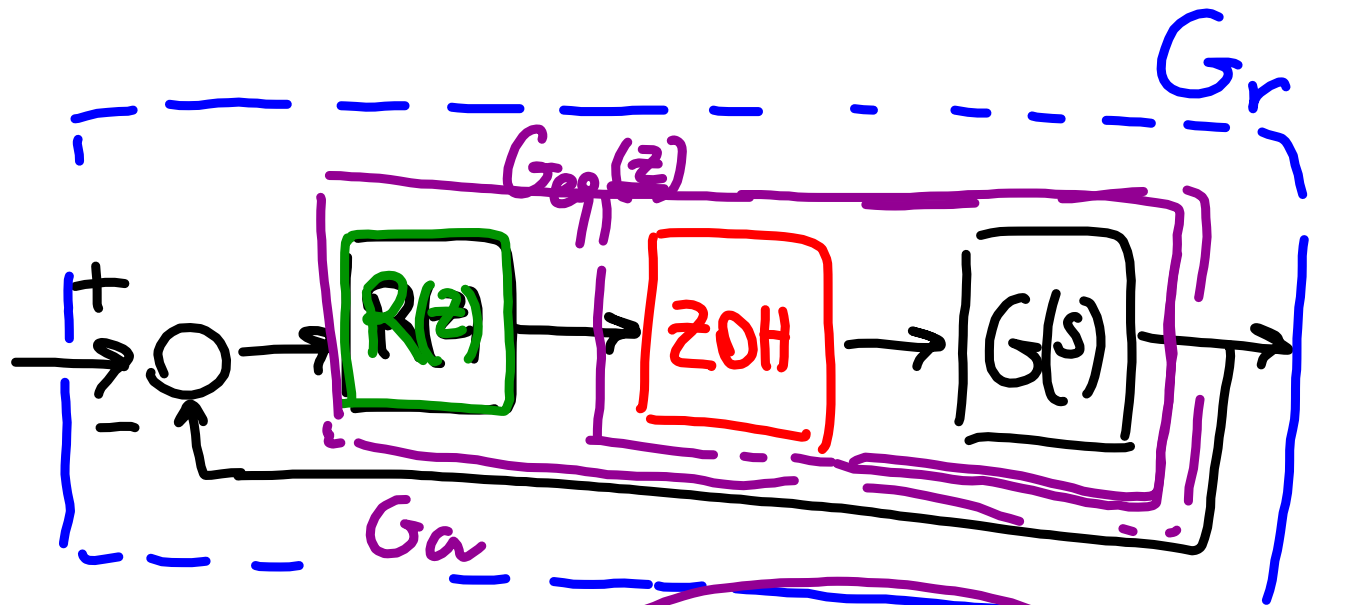
$$s = \frac{z-1}{T}$$

$$s = \frac{1-z^{-1}}{T}$$

$$s = \frac{z}{T} \frac{z-1}{z+1}$$

$$\mathcal{Z} \left[ \frac{1-e^{-sT}}{s} G(s) \right] = (1-z^{-1}) \mathcal{Z} \left[ \frac{G(s)}{s} \right]$$

$$R(s) = K \frac{1+s/10}{1+s/100}$$
$$R(z) = K R'(z) \quad s = \frac{z}{T} \frac{z-1}{z+1}$$



$$G_z(z) = \frac{R(z) \cdot G_{eq}(z)}{1 + R(z) \cdot G_{eq}(z)}$$

