Progetto Diretto

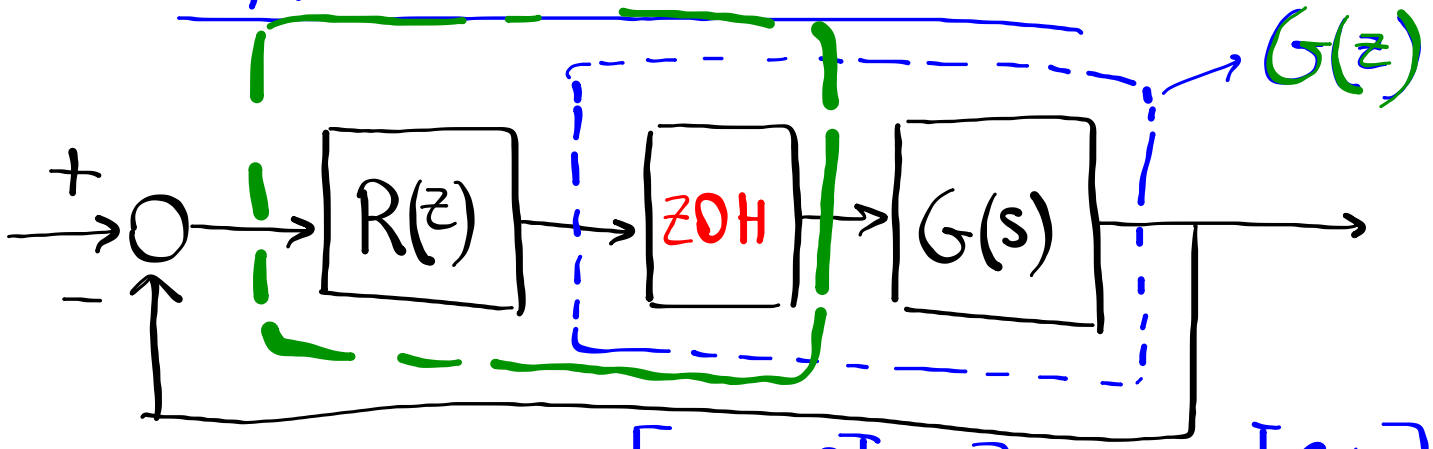
$$G(s) = \frac{1}{s(s+5)}$$

progettare $R(z) = K \dfrac{z - 0.8825}{z - 0.4}$

$T_a \leq 0.25\,s.$

$S\% \leq 0.5\%$ $(\delta \geq 0.85)$

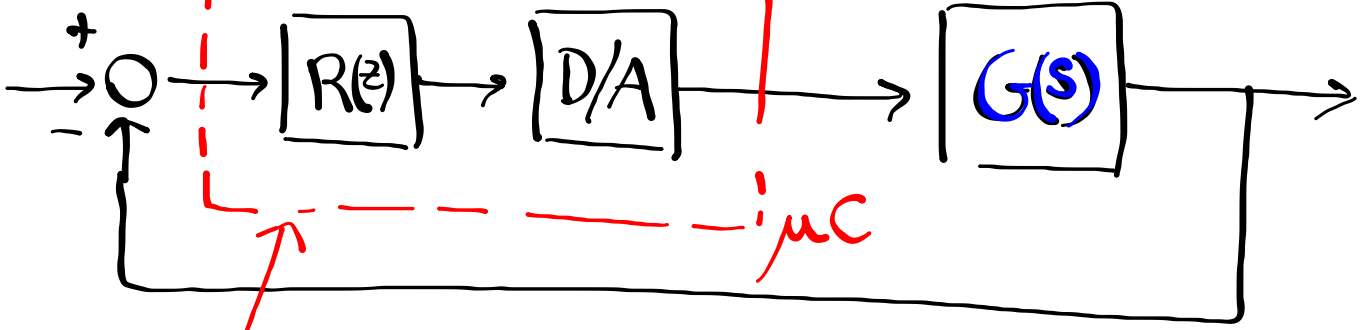
Metodo Diretto



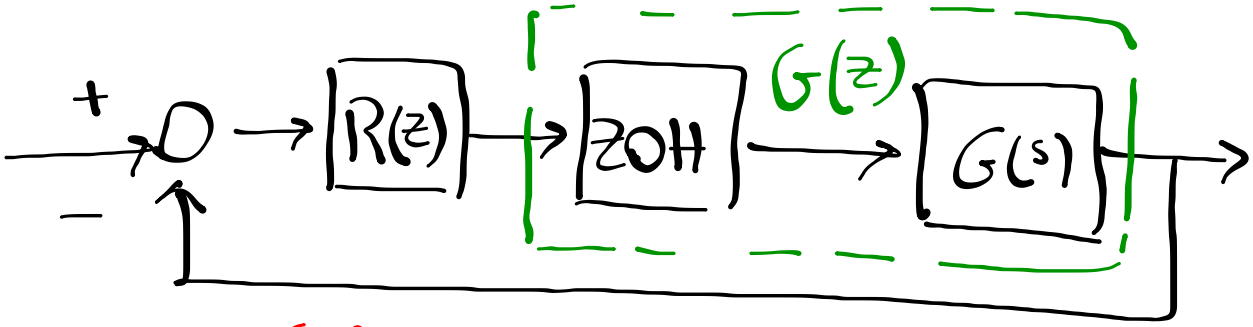
(Hold Equivalence) $G(z) = Z\left[\frac{1-e^{-sT}}{s} G(s)\right] = (1-z^{-1}) Z\left[\frac{G(s)}{s}\right]$

$G_a(z) = R(z) \cdot G(z)$

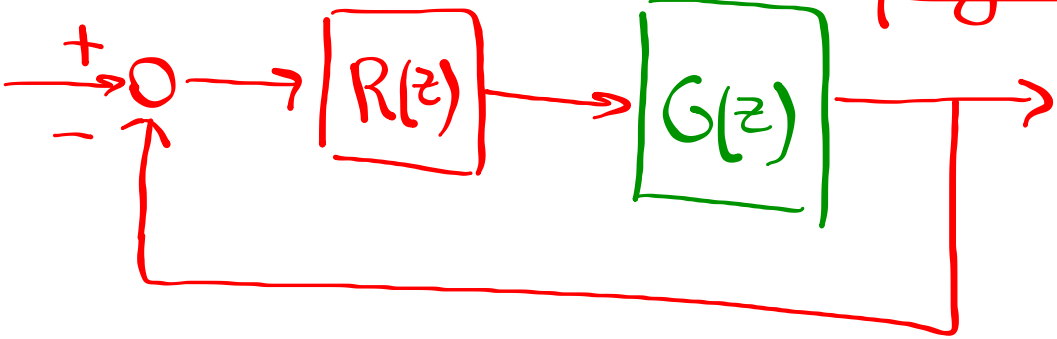
Implementazione a tempo reale



regolatore + convertitore D/A su micro-controllore



Schema logico di progetto



Metodo indiretto vs. metodo diretto