

$$H(z) = \frac{b_1 z + b_0}{z^2 + a_1 z + a_0} \stackrel{+}{=} \frac{Y(z)}{U(z)}$$

$$Y(z) (z^2 + a_1 z + a_0) = U(z) (b_1 z + b_0)$$

↓ IFF

$$y[k+2] + a_1 y[k+1] + a_0 y[k] = b_1 u[k+1] + b_0 u[k]$$

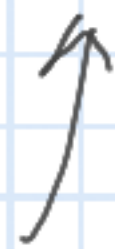
$\rightarrow -2$

$$y[k] + a_1 y[k-1] + a_0 y[k-2] = b_1 u[k-1] + b_0 u[k-2]$$

$$\hat{y}[k] = -\overset{\theta_i}{a_1} y[k-1] - a_0 y[k-2] + b_1 u[k-1] + b_0 u[k-2]$$

$$\hat{y}[k+1] = -a_1 y[k] - a_0 y[k-1] + b_1 u[k] + b_0 u[k-1]$$

$$\hat{y}[k+N]$$



Longo Interval.

$$\begin{bmatrix} \hat{y}[k] \\ \vdots \\ \hat{y}[k+N] \end{bmatrix} = \begin{bmatrix} y[k-1] \ y[k-2] \ u[k-1]^{T_{sk2}} \\ \vdots \\ y[k+N-1] \dots \end{bmatrix} \begin{bmatrix} -a_n \\ -a_{n-1} \\ \vdots \\ b_0 \end{bmatrix} \begin{bmatrix} \theta_1 \\ \vdots \\ \vdots \\ \theta_L \end{bmatrix}$$

