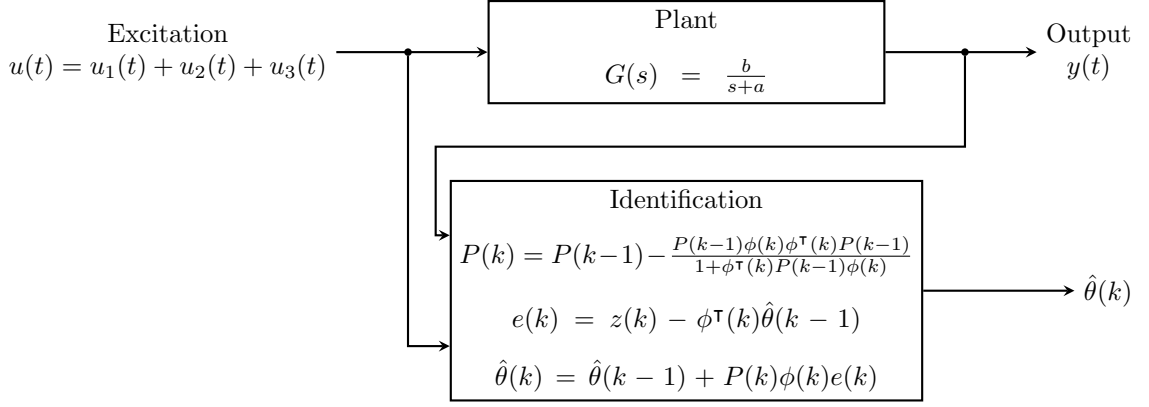

$P(0) = P_0 = P_0^{\intercal} > 0$, $P_0 = \rho \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$, $z = y(k)$, $\phi = \begin{bmatrix} y(k-1) & u(k-1) \end{bmatrix}^{\intercal}$,
$\theta = \begin{bmatrix} \theta_1 & \theta_2 \end{bmatrix}^{\intercal}$, $\hat{a} = \frac{-\ln \hat{\theta_1}}{T_S}$, $\hat{b} = \frac{\hat{\theta_2}\hat{a}}{1-\hat{\theta_1}}$, and T_S is sampling time.