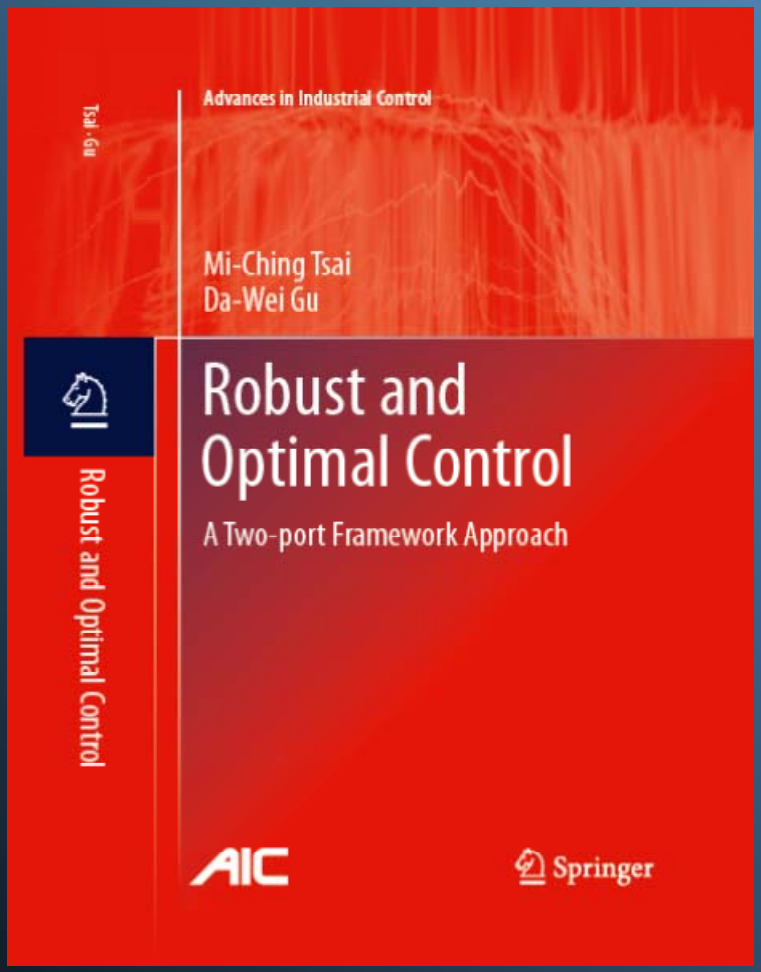
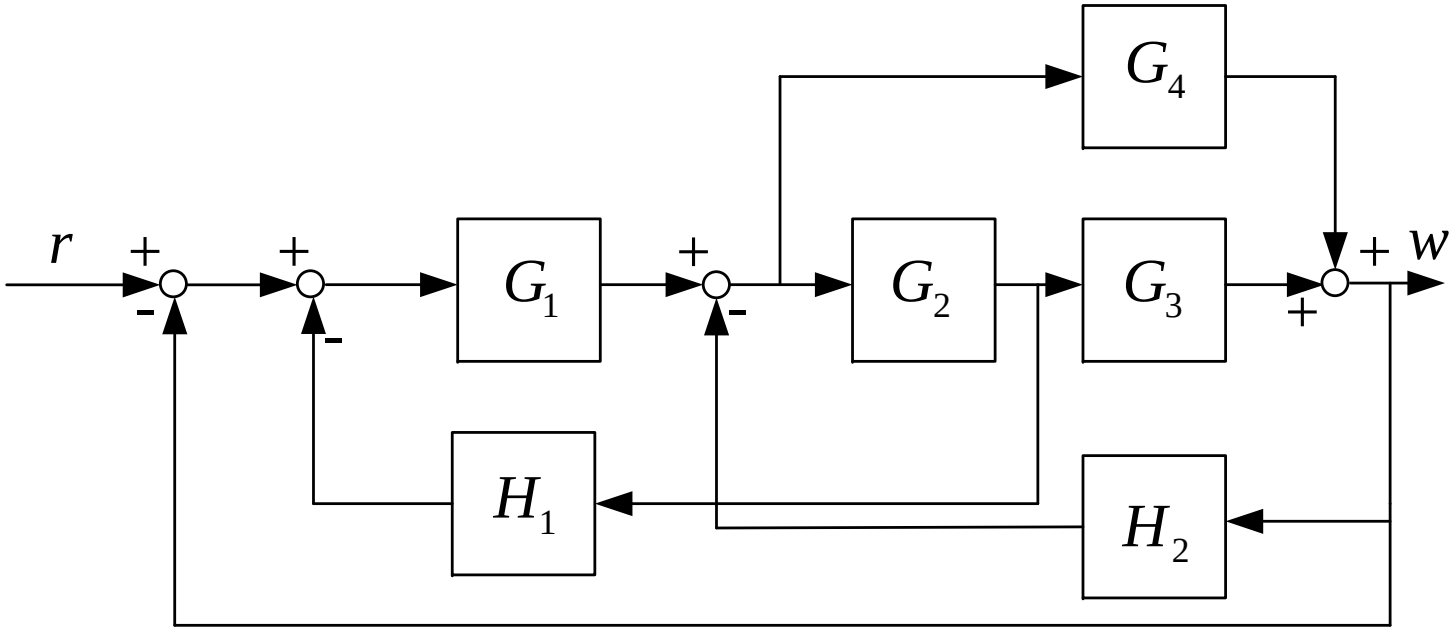


Robust and Optimal Control

A Two-port Framework Approach

Robust Control Example -LFT

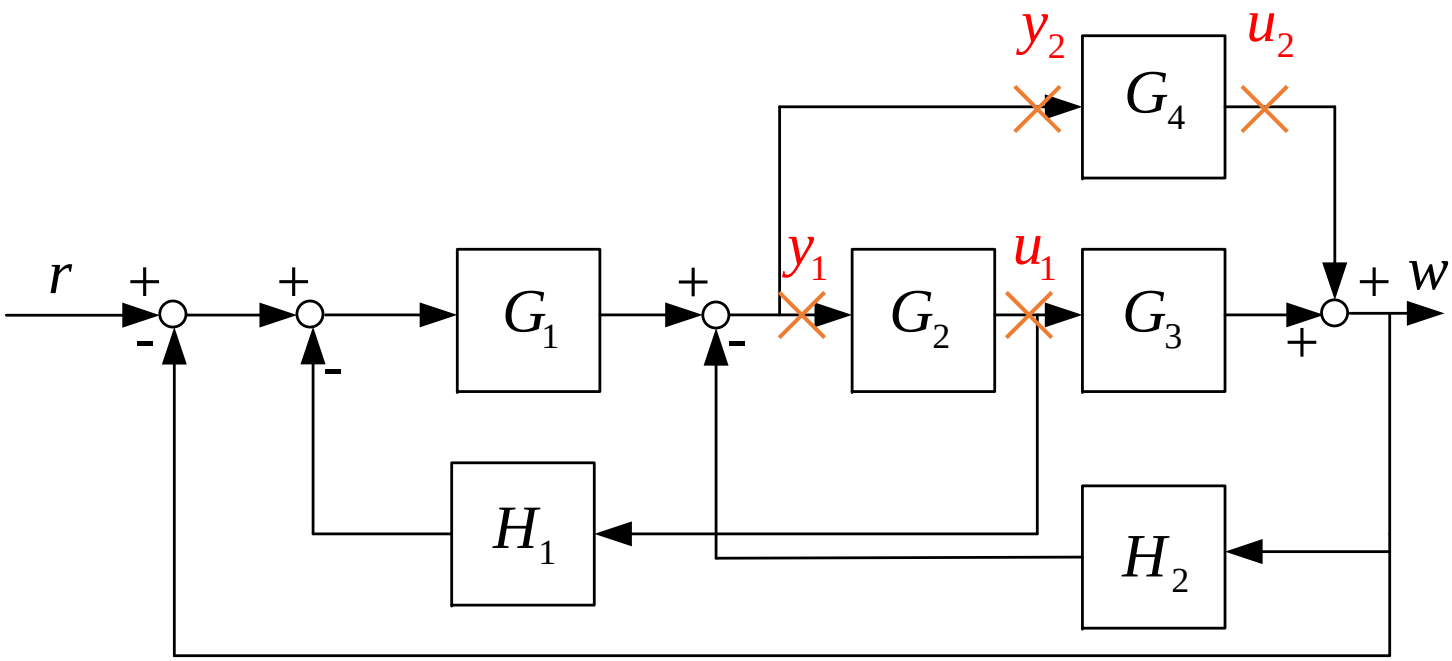
Example



Please implementing LFT method and Mason rule to find the transfer function of $\frac{w}{r}$,and comparing the two methods.

LFT method

Step 1:Setting the cut points where the system doesn't have any closed loop.



We knows this system should have at least two cut points to achieve 'no closed -loop in this system'.

The system inputs and outputs are

- System input: u_1 、u_2 、r
- System output: y_1 、y_2 、w