s = %s;

P = syslin('c',1/(s+1))

t = 0:0.01:20;

A = 1;

Omeg = 0.5;

u = A\*sin(Omeg\*t);

y = csim(u,t,P);

yss = A/(1+Omeg\*Omeg)\*(sin(Omeg\*t)-Omeg\*cos(Omeg\*t));

plot2d(t,u,style=color(125,125,125));

plot2d(t,y,style=3);

plot2d(t,yss,style=2);

xtitle("Frequency Response","time[s]","u,y,yss");

xgrid();