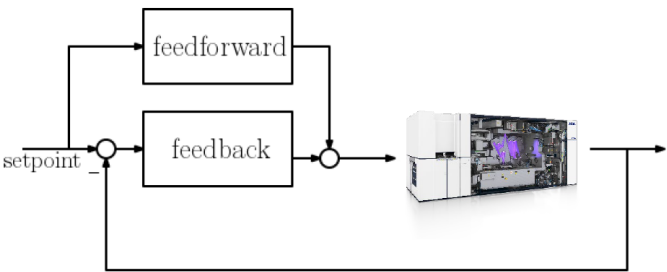


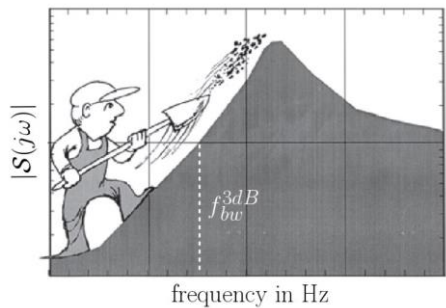
Nonlinear Control for Performance

Hybrid Integrator-Gain Systems: A Remedy for Overshoot Limitations in Linear Control? (tue.nl)

Motivation

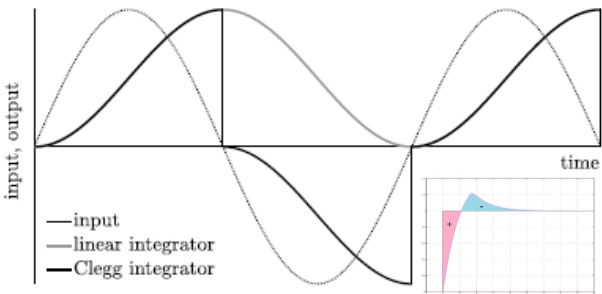


Fundamental Limitation of LTI Controller

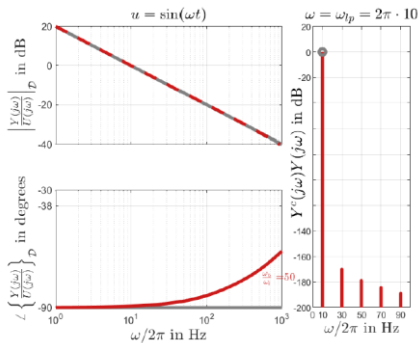


$$\int_0^\infty \ln |S(j\omega)| d\omega = \pi \sum_k \text{Re}(p_k) - \frac{\pi}{2} \lim_{s \rightarrow \infty} sL(s)$$

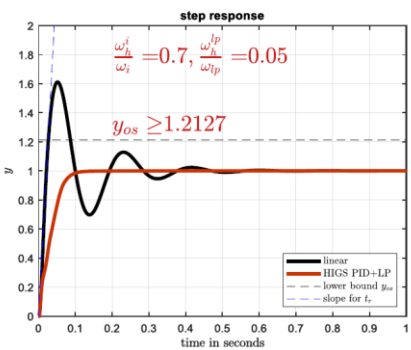
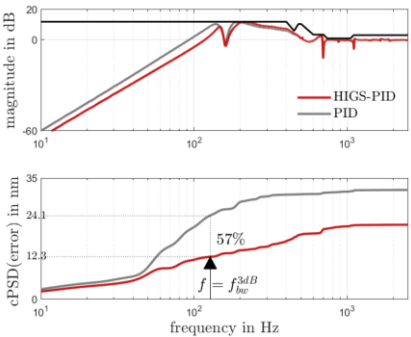
Reset Control



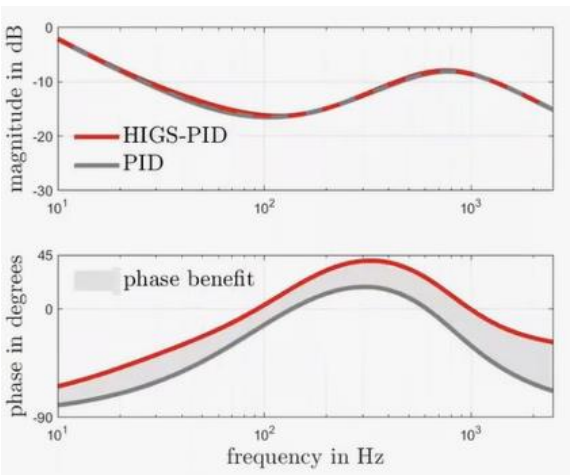
Describing Functions and Transfer Functions



Benefits



How nice, if..!



HIGS

