



Figure 9.12: Bode plot of the transfer function $C(s) = 20 + \frac{10}{s} + 10s = 10 \frac{(s+1)^2}{s}$, corresponding to an ideal PID controller. The upper plot is the gain curve and the lower plot is the phase curve. The dashed lines show straight-line approximations of the gain curve and the corresponding phase curve.