

Meeting

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Progress report

Collect 5,000 trajectories and calculate the mean performance.

Table 1: Step Performance of the Controller

	β	ϕ	θ
Rise time(sec)	0.2346	0.1563	0.1842
2% Settling time(sec)	7.8495	7.8894	8.2162
5% Settling time(sec)	4.3881	4.2785	4.4597
Overshoot(%)	17.2318	23.8851	18.8808
Undershoot(%)	6.7786	5.7071	6.0666
Steady-state error	0.0006	0.0007	0.0015

Progress report

$$\begin{aligned}Q &= \text{diag}(0.1, 0.1, 1, 100, 100, 1, 1, 100) \\S_e &= \text{diag}(1, 1, 1, 0.1, 0.1, 1, 1, 0.1) \\R &= \text{diag}(1, 1, 0, 1) \\S_\delta &= \text{diag}(0.2, 0.2, 1, 0.2) \\\tau &= 2\end{aligned}\tag{1}$$