FS-LQR Nominal - Beam angular displacement wrt Hub Integrator state weight: 0.01 25 20 15 10 $heta_{displacement}(t)[deg]$ 5 -5 -10 $\theta(t)$ Nominal Sim -15 $\theta(t)$ Black Box $\theta(t)$ Real Lab -20 2 3 8 5 6 t [s]