

# Gazebo

# Real Experiment

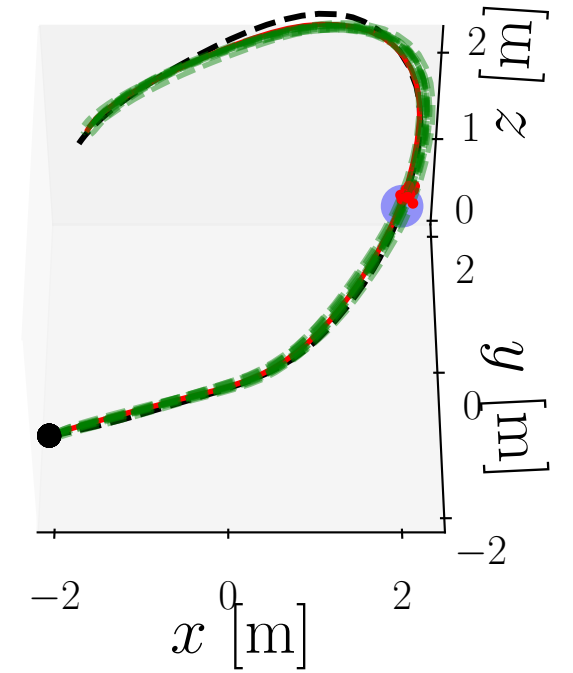
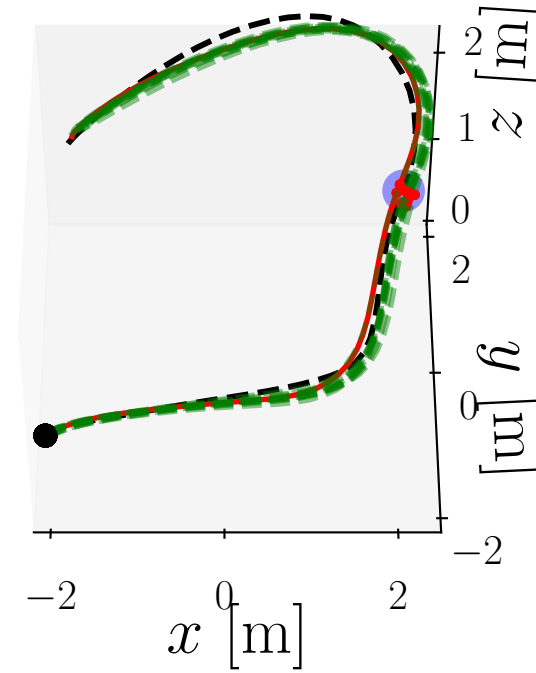
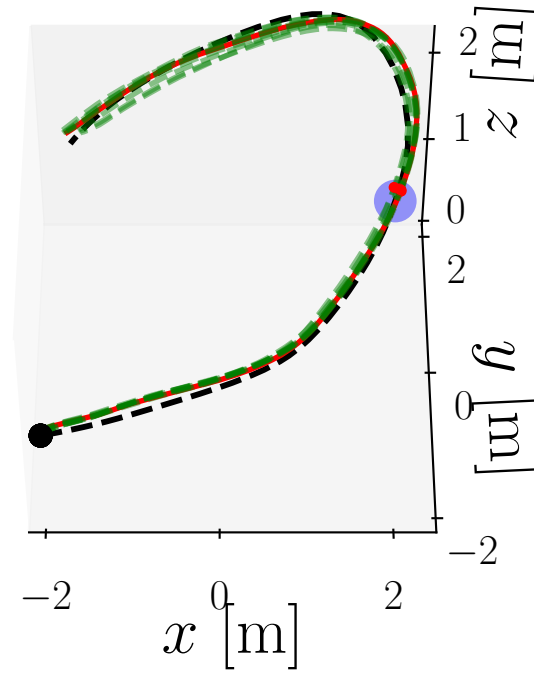
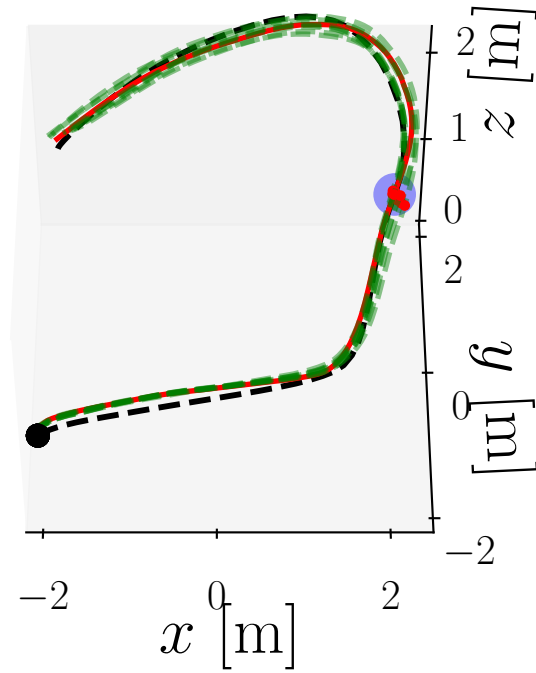
## INIT

## $OPT_a$

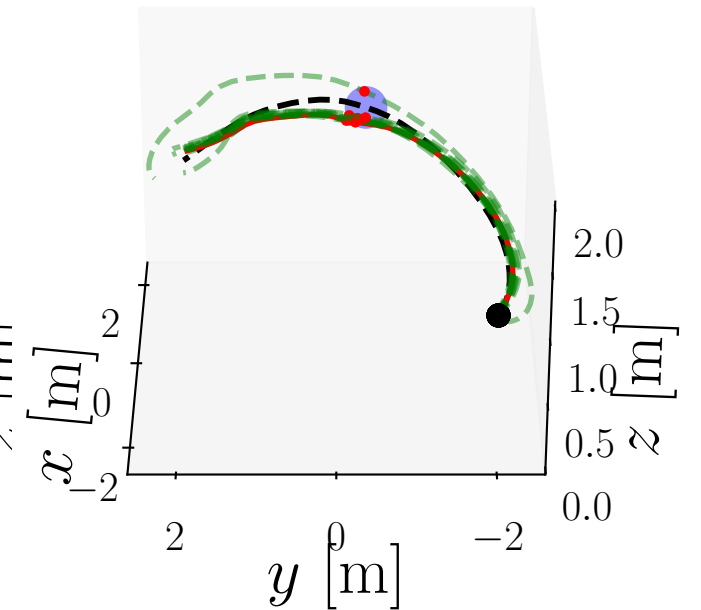
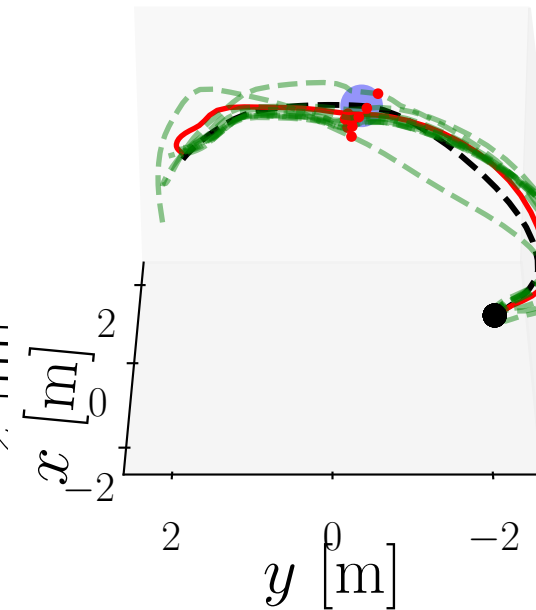
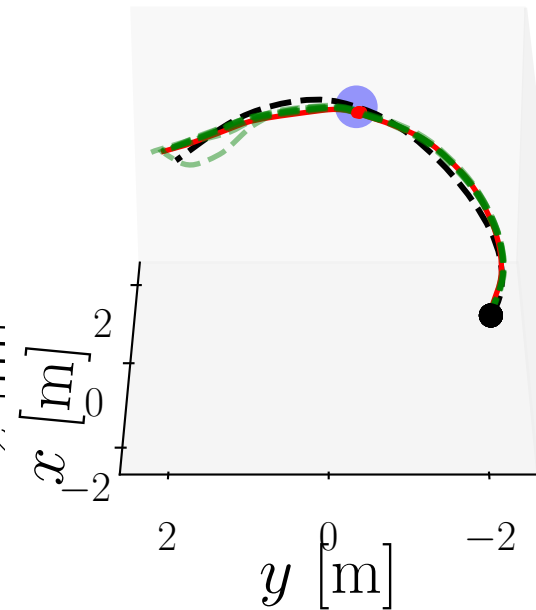
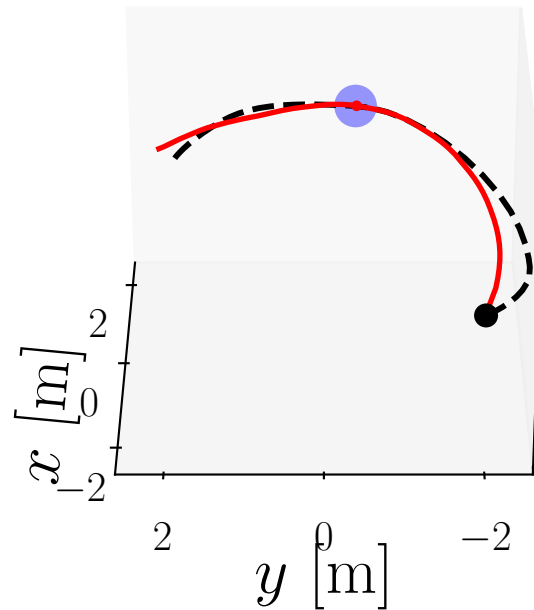
## INIT

## $OPT_a$

### Traj 1



### Traj 2



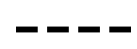
Desired Target:  $r_d(t_w)$



Nominal Controller tracking



$p \neq p_c$  Controller tracking with perturbation



Reference Trajectory



closest positions to target