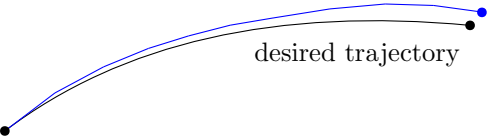actuated effective motion

desired trajectory