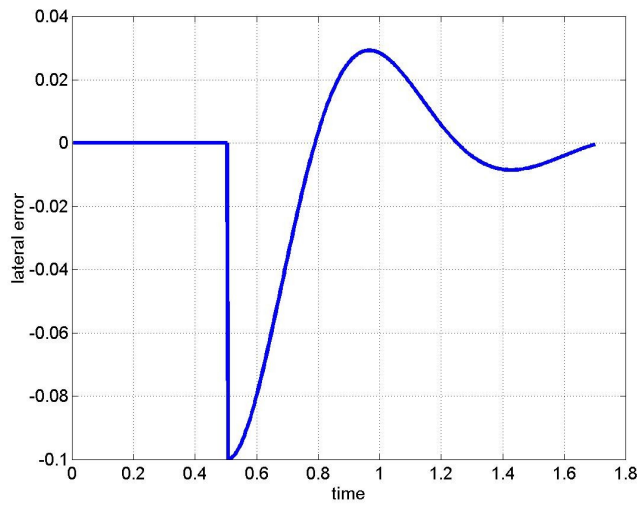


# EE192 Steer Control Practice Problem



Measured step response (as function of time) on a 10 cm step at 2 m/sec using P+D controller is given as shown above.

Note per cent overshoot is 30%, and it takes 0.3 sec after crossing the line to recross.

For initial car position as shown on path, car speed 2 m/sec, sketch lateral error  $y_a$  as function of longitudinal **distance**. Numbers are path length in m (min radius turn).

