

4-7. A 5 lb rod is suspended in the vertical position at rest. A 1 lb ball hits the rod at velocity $v_0 \sim N(100, 10^2)$ ft/s. If $d = 2$ ft and $L = 3$ ft, determine the distribution of the angular velocity of the rod just after the strike. Assume $e = 0.6$.

Solution: $\omega \sim N(16.84, 1.68^2)$ rad/s

