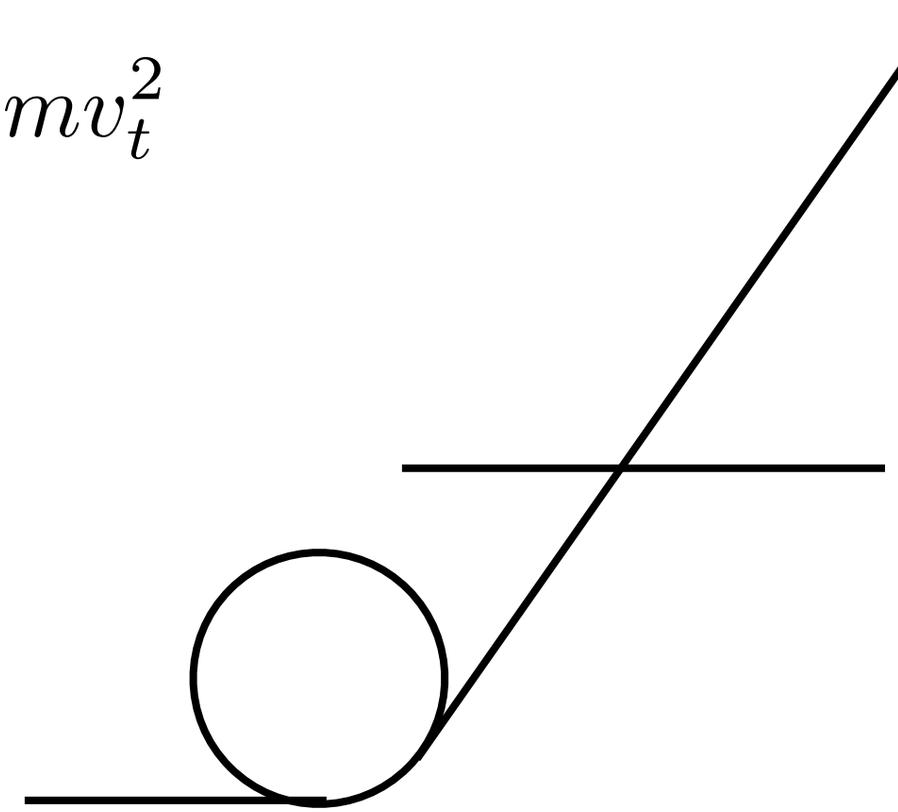
Kulebane

$$-mg = -m\frac{v_t^2}{r} \Rightarrow v_t^2 = gr$$

$$mgh_1 + 0 = mg(2r) + \frac{1}{2}mv_t^2$$

$$gh_1 = g(2r) + \frac{1}{2}gr$$

$$h_1 = \frac{5}{2}r = \frac{5}{4}(2r)$$



Energidiagram

$$U = \frac{1}{2}kx^2$$

$$F_x = -\frac{dU}{dx}$$