

## Hooke's Law :

— Tension  $\propto x$   
↳  $T \propto x$   
↳  $T = kx$

— This constant  $k$  depends on:

↳ The unstretched (natural) length of the string or spring ( $L$ )

↳ The Modulus of elasticity ( $\lambda$ )

—  $k = \lambda / L \Rightarrow T = \frac{\lambda L}{x}$

— This is what is called Hooke's

— Modulus of elasticity is often also referred to as Young's Modulus, especially in physics

