

Konfter

Newton's love

1. $a=0$ vis $F_{\text{res}}=0$

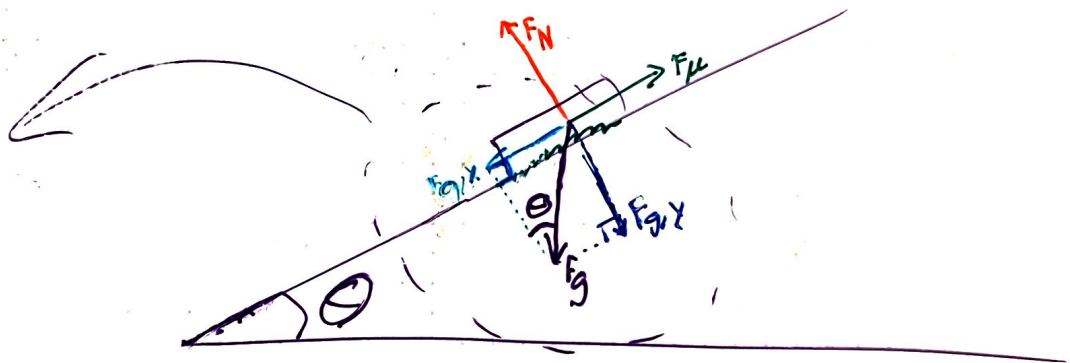
2. $F=m \cdot a$

3. action = reaktion

$$[F] = N = \frac{\text{kg} \cdot \text{m}}{\text{s}^2}$$

$$F_{\text{res}} = \sum_{i=1}^n F_i + F_2 + \dots + F_n$$

girdning på skräplan



$$\cos(\theta) = \frac{F_N}{F_g}$$

$$F_N = \cos(\theta) \cdot F_g = \cos(\theta) \cdot m \cdot g$$

$$\sin(\theta) = \frac{F_{g,x}}{F_g}$$

$$F_{\mu} = \mu \cdot F_N = \mu \cdot m \cdot g \cdot \cos(\theta)$$

$$F_{\text{res}} = m \cdot g \cdot \sin(\theta) - \mu \cdot m \cdot g \cdot \cos(\theta)$$

$$F_{g,x} = \sin(\theta) \cdot F_g = \sin(\theta) \cdot m \cdot g$$

kritisk vinkel

$$m \cdot g \cdot \sin(\theta) > \mu \cdot m \cdot g \cdot \cos(\theta)$$

$$\sin(\theta) > \mu \cdot \cos(\theta)$$

$$\frac{\sin(\theta)}{\cos(\theta)} > \mu$$
$$\tan(\theta) > \mu$$