

CAMPO GRAVITATORIO

VS CAMPO ELECTROSTATICO

C. GRAVITATORIO

$$\vec{F} = -G \cdot \frac{M \cdot m}{r^2} \cdot \vec{u}$$

$$G = 6,67 \cdot 10^{-11} \text{ N} \cdot \text{m}^2 / \text{kg}^2$$

$$\vec{g} = \frac{\vec{F}}{m} \quad \vec{F} = m \cdot \vec{g}$$

$$\vec{g} = -G \cdot \frac{M}{r^2} \cdot \vec{u}$$

$$E_p = -G \cdot \frac{M \cdot m}{r}$$

$$V = \frac{E_p}{m}$$

$$V = -G \cdot \frac{M}{r}$$

$$W_{A \rightarrow B} = E_p(A) - E_p(B)$$

C. ELECTROSTATICO

$$\vec{F} = k \cdot \frac{Q \cdot q}{r^2} \cdot \vec{u}$$

$$K = 9 \cdot 10^9 \text{ N} \cdot \text{m}^2 / \text{C}^2$$

$$\vec{E} = \frac{\vec{F}}{q} \quad \vec{F} = q \cdot \vec{E}$$

$$\vec{E} = k \cdot \frac{Q}{r^2} \cdot \vec{u}$$

$$E_p = k \cdot \frac{Q \cdot q}{r}$$

$$V = \frac{E_p}{q}$$

$$V = k \cdot \frac{Q}{r}$$

$$W_{A \rightarrow B} = E_p(A) - E_p(B)$$