$$\bar{F} = m\bar{a}$$

↑

"inertia"

"gravita'"

↓

$$\bar{F}_G = -\gamma \frac{m\,m'}{r^2}\,\bar{u}_2$$

↳ $m_I \rightarrow$ massa inertiale

$m_G \rightarrow$ massa gravitazionale

$$P = m_I g = \gamma \frac{m_{I_T}\, m_I}{r_T^2} \Rightarrow \boxed{g = \gamma \frac{m_{I_T}}{r_T^2}} \quad \text{OK}$$

$$m_G = C\, m_I$$

$$P = \gamma \frac{m_{I_T}\, m_I}{r_T^2} = \gamma \frac{\frac{m_{G_T}}{C}\,\frac{m_G}{C}}{r_T^2} = \frac{\gamma}{C^2} \frac{m_{G_T}\, m_G}{r_T^2} =$$

$$= \gamma^* \frac{m_{G_T} m_G}{r_T^2} \Rightarrow \boxed{\bar{F}_G = -\gamma^* \frac{m_G m_G'}{r^2}\,\bar{u}_2}$$

$$P = \gamma^* \frac{m_{G_T} m_G}{r_T^2} = m_I g \Rightarrow \boxed{g = \gamma^* \frac{m_{G_T} m_G}{r_T^2\, m_I}} =$$

$$= \frac{\gamma}{C} \frac{C\, m_{I_T}}{r_T^2} C = \gamma \frac{m_{I_T}}{r_T^2}$$

$g' \frac{m_G}{m_I}$

$$C = \frac{m_G}{m_I} = 1 \Rightarrow \boxed{\gamma^* = \gamma} \quad \boxed{m_G = m_I}$$

$$T = 2\pi\sqrt{\frac{\ell}{g}} = 2\pi\sqrt{\frac{\ell}{g}\frac{m_I}{m_G}}$$

$$\boxed{\frac{m_G}{m_I} = \text{cost}}$$ Principio di equivalenza