g → camp. $\frac{F}{m}$ → 9,8 N/kg

→ accelerazione 9,8 m/s² = 9,8 m/s/s

1 s → 9,8 m/s ≈ 10 m/s

2 s ≈ 20 m/s → km/h

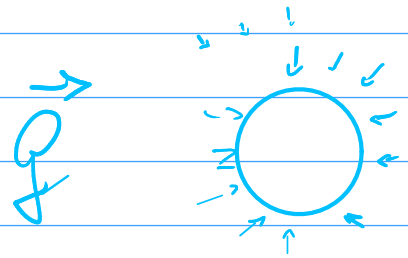
3 s ≈ 30 km/s

g = ... km/h/s → ≈ 35 km/h/s

Campo vettoriale vs campo scalare

mappe dei venti!

mappe pressione temperatura



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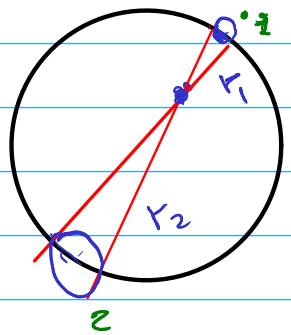
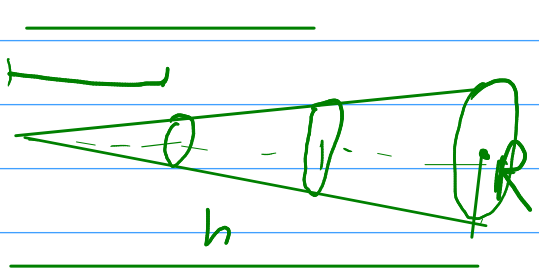
sfera → modello a cipolle

→ gusci concentrici





$S \propto R^2 \propto h^2$

$F^{(1)} \propto \frac{m^{(1)}}{r_1^2}$

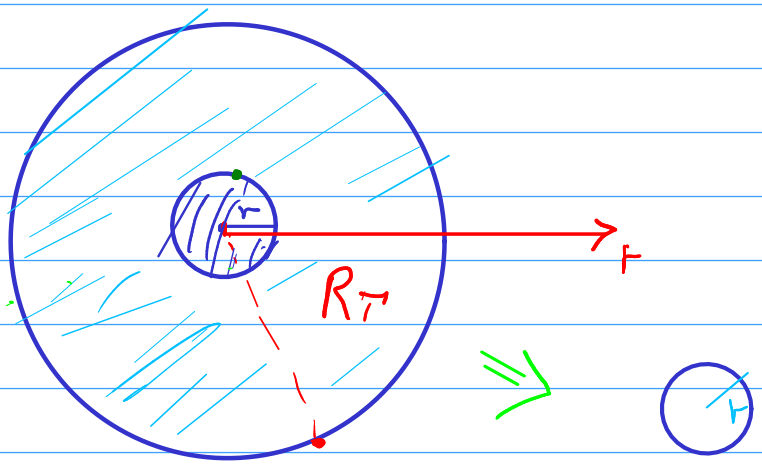
$tg\alpha = \frac{R}{h}$

$R \propto h$

$$F \propto \frac{m_{calotta}}{r^2}$$ ← punto-calotta !

$$\propto \rho_{superf} \cdot \frac{S}{r^2} \propto \rho_{sup} \cdot \frac{r^2}{r^2}$$!

⇒ un punto materiale dentro un guscio sferico di densità sup. omogenea non risente di forze!!!



$$F = -\frac{G\, m(r) \cdot m_0}{r^2}$$

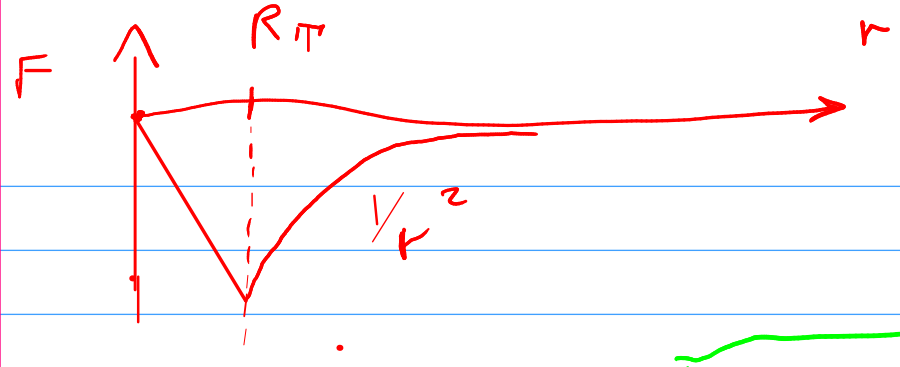
$$\propto -\frac{\rho(r) \cdot V(r)}{r^2}$$

$$\propto -\frac{r^3}{r^2} = -r$$

$$F(r) \propto -r \cdot m_0$$

$$F(r = R_T) = -m_0 \cdot g$$

$$\boxed{F(r) = -\frac{g}{R_T} \cdot r \cdot m_0}$$



se $\rho(r)$ $\longrightarrow$ $F(r) \propto \rho(r) \cdot r \cdot m_0$