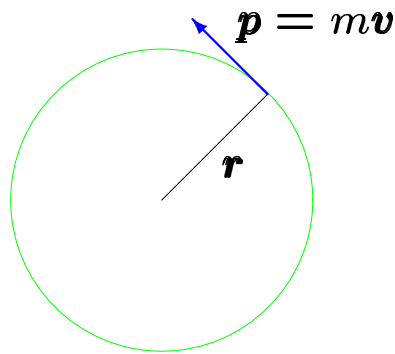


Quando la meccanica quantistica?

$$h = 6.626\ 075\ 5(40) \times 10^{-34} \text{ J s}$$

$$\begin{aligned} [h] &= [\text{azione}] = [\text{energia} \cdot \text{tempo}] \\ &= [\text{lunghezza} \cdot (\text{quantità di moto})] \\ &= [\text{momento angolare}] \end{aligned}$$



$$\bullet \quad \begin{cases} m = 1 \text{ kg} \\ v = 1 \text{ m s}^{-1} \\ r = 1 \text{ m} \end{cases} \rightarrow L = mvr = \boxed{1 \text{ J s}}$$

$$\bullet \quad \begin{cases} e = 1.6 \times 10^{-19} \text{ C} \\ \frac{mv^2}{r} = \frac{1}{4\pi\epsilon_0} \frac{e^2}{r^2} \\ r = a = 0.53 \times 10^{-10} \text{ m} \end{cases} \rightarrow L = \sqrt{\frac{e^2}{4\pi\epsilon_0} ma} = \boxed{1.05 \times 10^{-34} \text{ J s}}$$