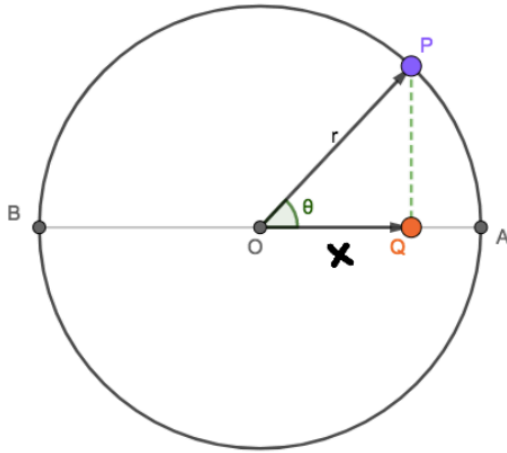


Il moto armonico

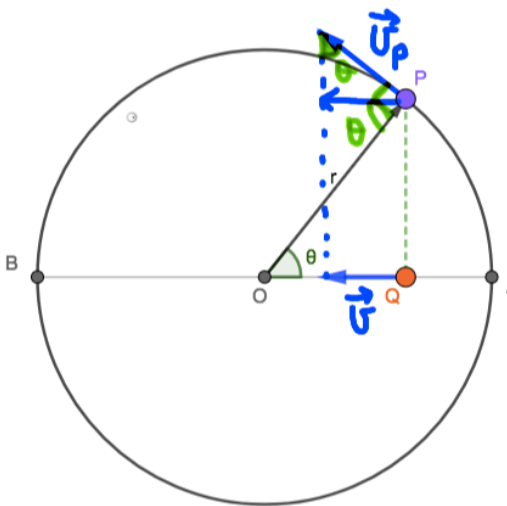


$$x = r \cdot \cos \theta = A \cdot \cos(\omega t)$$

\downarrow \downarrow
 A $\omega \cdot t$

$$x = A \cdot \cos(\omega t)$$

EQUAZIONE DEL
MOTO ARMONICO



$$\omega \cdot r = \omega \cdot A$$

$$v = -v_p \cdot \sin \theta$$

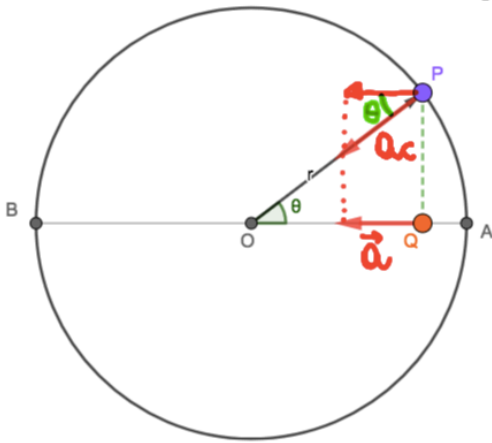


$$v = -\omega A \sin(\omega t)$$

FUNZIONE OSCILLANTE
SFASATA RISPETTO A X

$$v_{MAX} = \omega \cdot A$$

ACCELERAZIONE



$$a = -a_c \cdot \cos \theta$$

\downarrow $\omega^2 \cdot r = \omega^2 \cdot A$ $\rightarrow \omega t$

$$a = -\omega^2 A \cos(\omega t)$$

\downarrow x

$$a = -\omega^2 \cdot x$$

