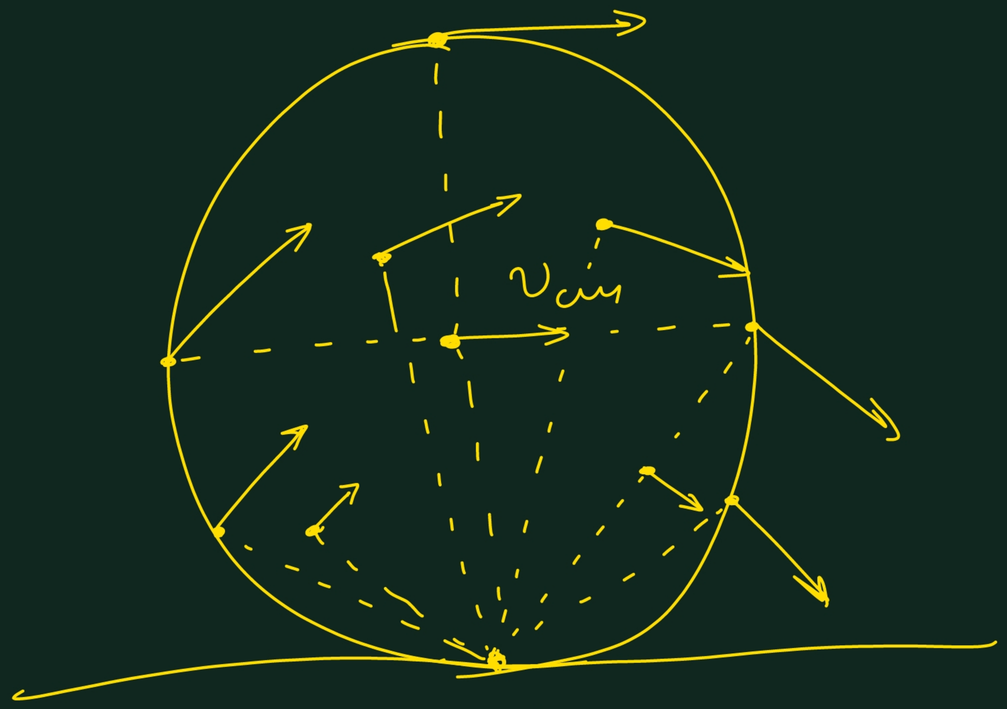
07/10/24



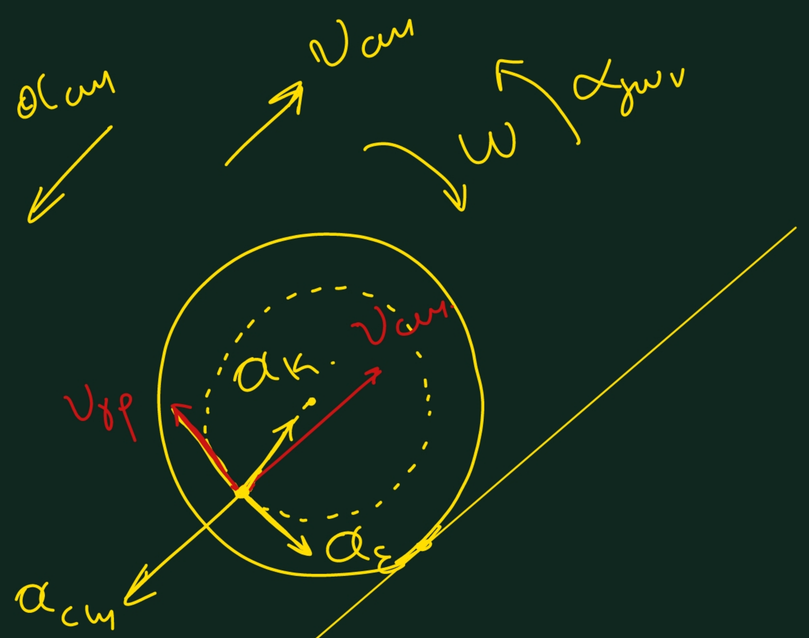
$$v_{cm} = w \cdot R$$

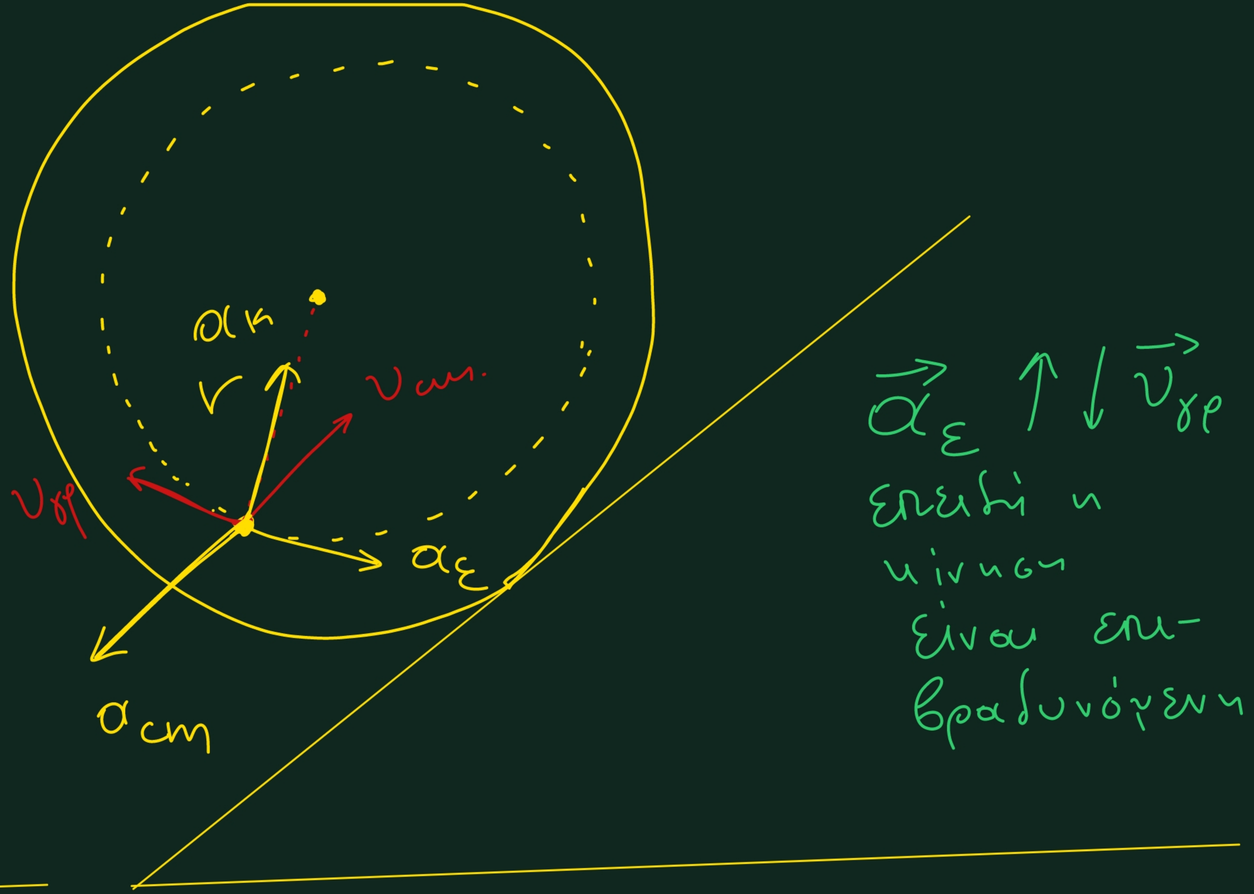
$$\Delta x = v_0 \cdot \Delta t \pm \frac{1}{2} a \cdot \Delta t^2$$

$$\Delta \theta = w_0 \cdot \Delta t \pm \frac{1}{2} \alpha_{ang} \cdot \Delta t^2$$

$$a = a_{cm}$$

$$\alpha_{ang} = \frac{\Delta w}{\Delta t} = \frac{dw}{dt}$$





$\vec{\alpha}_\varepsilon \uparrow\downarrow \vec{\upsilon}_{\gamma\rho}$
επειδή η κίνηση είναι επιβραδυνόμενη

$\alpha_\varepsilon = \alpha_{\gamma\omega\nu} \cdot r$ (επιτρόχια επιβράδυνση)

$\alpha_{cm} = \alpha_{\gamma\omega\nu} R$ (αν έχουμε κύλιση χωρίς ολίσθηση)

$\alpha_k = \omega^2 \cdot r$ (κεντρομόλος επιτάχυνση)