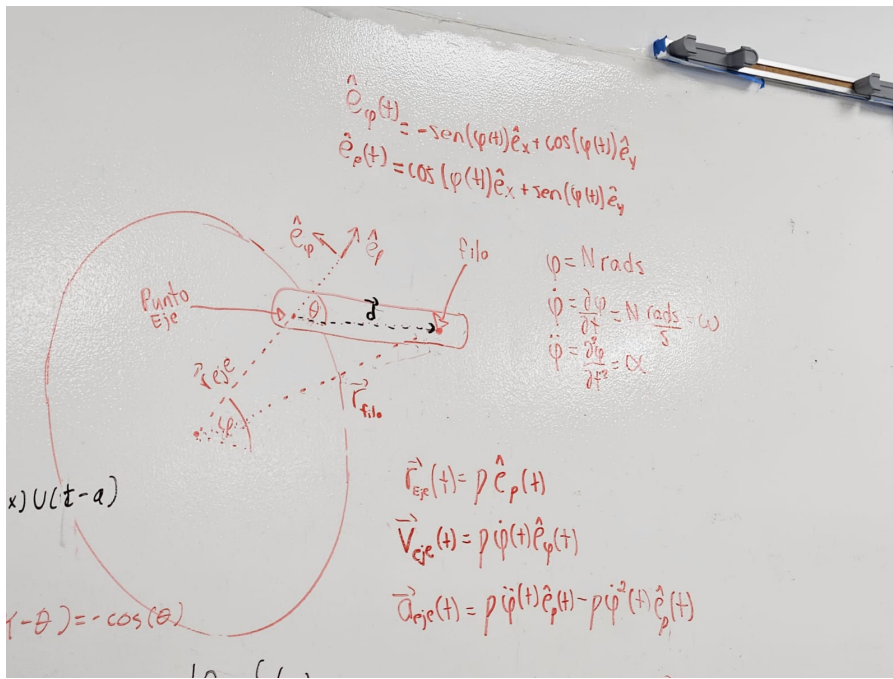


Se describe el comportamiento del punto del eje de la cuchilla:



$$\hat{e}_\varphi = -\sin(\varphi(t))\hat{e}_x + \cos(\varphi(t))\hat{e}_y$$

$$\hat{e}_\rho = \cos(\varphi(t))\hat{e}_x + \sin(\varphi(t))\hat{e}_y$$

$$\varphi = N \text{ rads}$$

$$\dot{\varphi} = \frac{\partial \varphi}{\partial t} = N \frac{\text{rad}}{s} = \omega$$

$$\ddot{\varphi} = \frac{\partial^2 \varphi}{\partial t^2} = \alpha$$

$$\vec{r}_{Eje}(t) = \rho \hat{e}_\rho(t)$$

$$\vec{V}_{Eje}(t) = \rho \dot{\varphi}(t) \hat{e}_\varphi(t)$$

$$\vec{a}_{Eje}(t) = \rho \ddot{\varphi}(t) \hat{e}_\rho(t) - \rho \dot{\varphi}^2(t) \hat{e}_\rho(t)$$

Postulados  $\vec{r}_{fillo} = \vec{r}_{Eje} + \vec{d}$

1. Cuando  $\theta$  es 0,  $\vec{r}_{fillo}$  es igual a  $|\vec{r}_{Eje}| + |\vec{d}|$

Cuando  $\theta$  es  $\pi$ ,  $\vec{r}_{fillo}$  es igual a  $|\vec{r}_{Eje}| - |\vec{d}|$

$$d = |\vec{r}_{Eje} - \vec{r}_{fillo}|$$