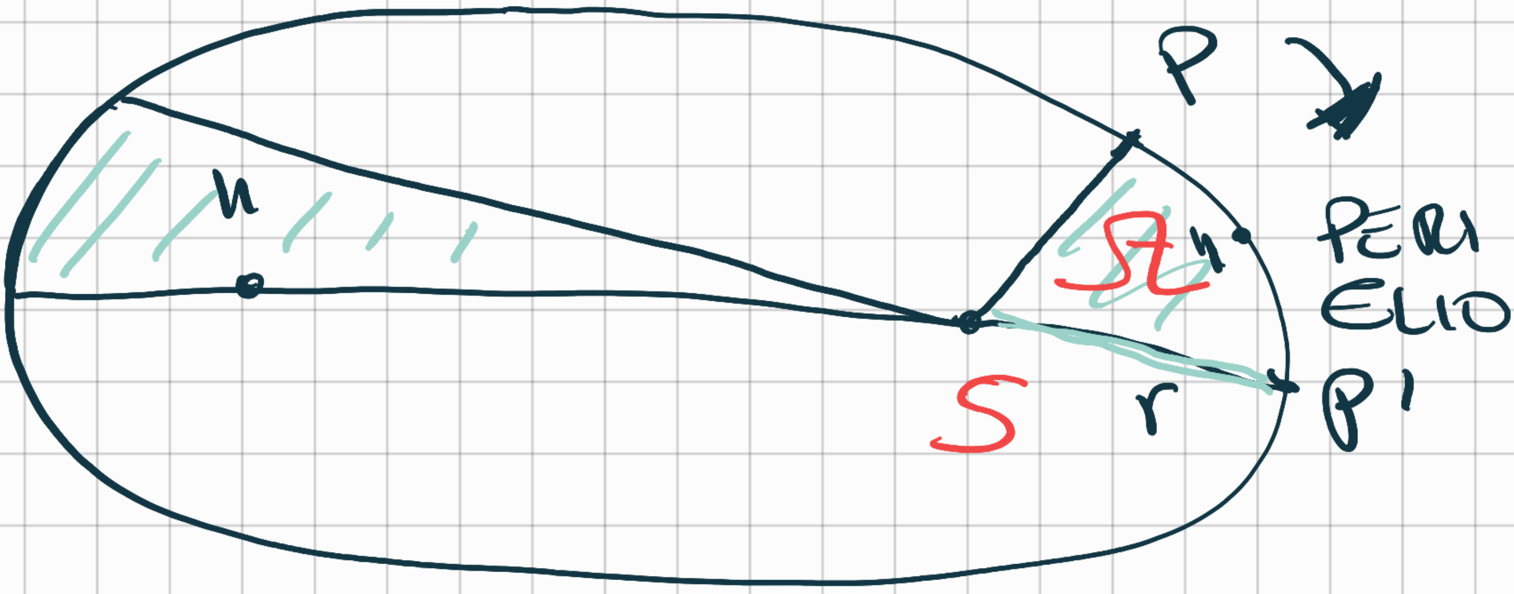
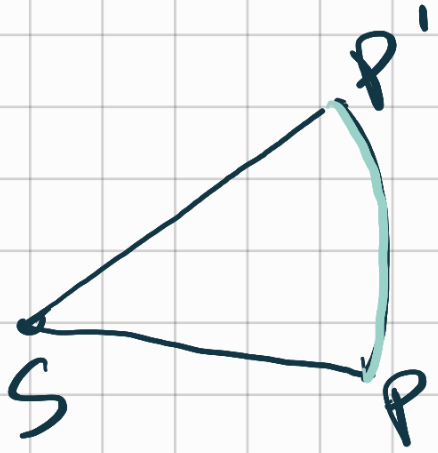


$$\Omega = \frac{1}{2}\,\overrightarrow{SP} \times \overrightarrow{SP'}$$

$$\overline{PP'}$$



$$\overrightarrow{SP'} = \overrightarrow{SP} + \overrightarrow{PP'}$$

$$\overline{PP'} = \vec{v}\,dt$$

$$\Omega = \frac{1}{2}\vec{SP} \times (\vec{SP} + \vec{v}dt)$$

$SP \cdot SP \sin 0$

$$= \frac{1}{2}\cancel{\vec{SP} \times \vec{SP}} + \frac{1}{2} SP \times vdt$$

$$\Omega = \frac{1}{2} \vec{SP} \times \vec{v}dt$$

$$\frac{\Omega}{dt} = \frac{1}{2} \vec{SP} \times \vec{v}$$

$$\frac{\Omega}{dt} = \frac{1}{2m} \underbrace{\vec{SP} \times m\vec{v}}$$

$$= \frac{1}{2m} \vec{l}$$

cost

$$\dot{A} = \frac{1}{2m}\vec{L}$$

$$\ddot{A} = 0$$

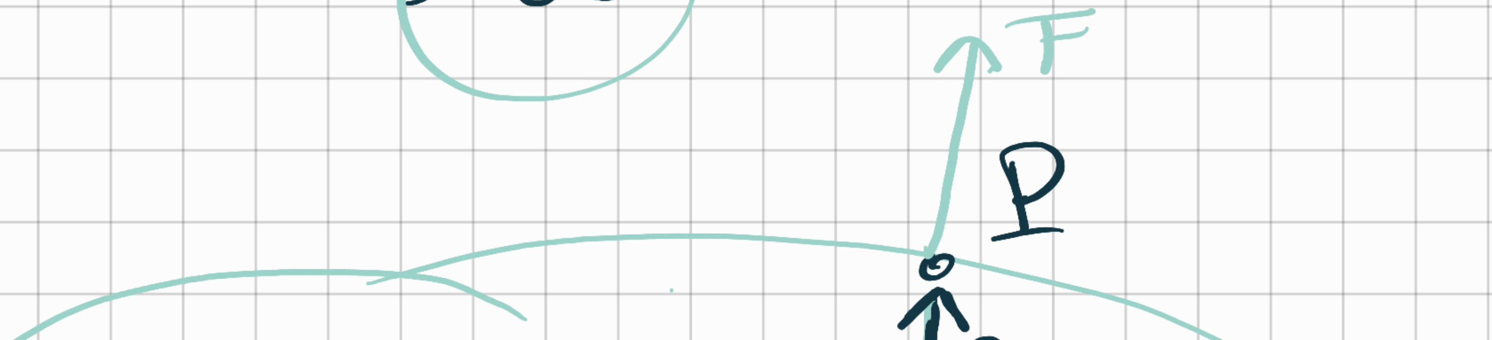
$$\dot{\vec{L}} = 0 \implies \vec{\tau}_0^{(e)} = \dot{\vec{L}}_0$$

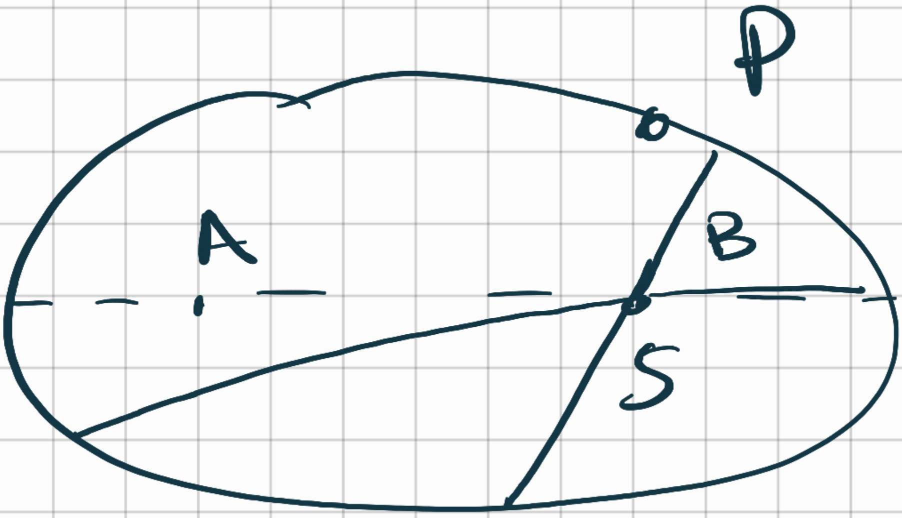
$$\tau_0 = \vec{r}\times\vec{F}$$

$$\vec{r}\times\vec{F} = 0$$

$\sin\alpha$

180 / 0





$$\overset{\circ}{\overline{AP}} = -\overset{\circ}{\overline{BP}}$$

$$AP + BP = 2a$$

$$G = \frac{a^3}{T^2}$$

CIRCOLARE

$$\vec{F} = m\vec{a}$$

5

$$a = \frac{v^2}{R}$$

$$v = \frac{2\pi r}{T}$$

$$v^2 = \frac{(2\pi r)^2}{T^2}$$

$$a = \frac{v^2}{R} = \frac{(2\pi r)^2}{T^2} \cdot \frac{1}{r}$$

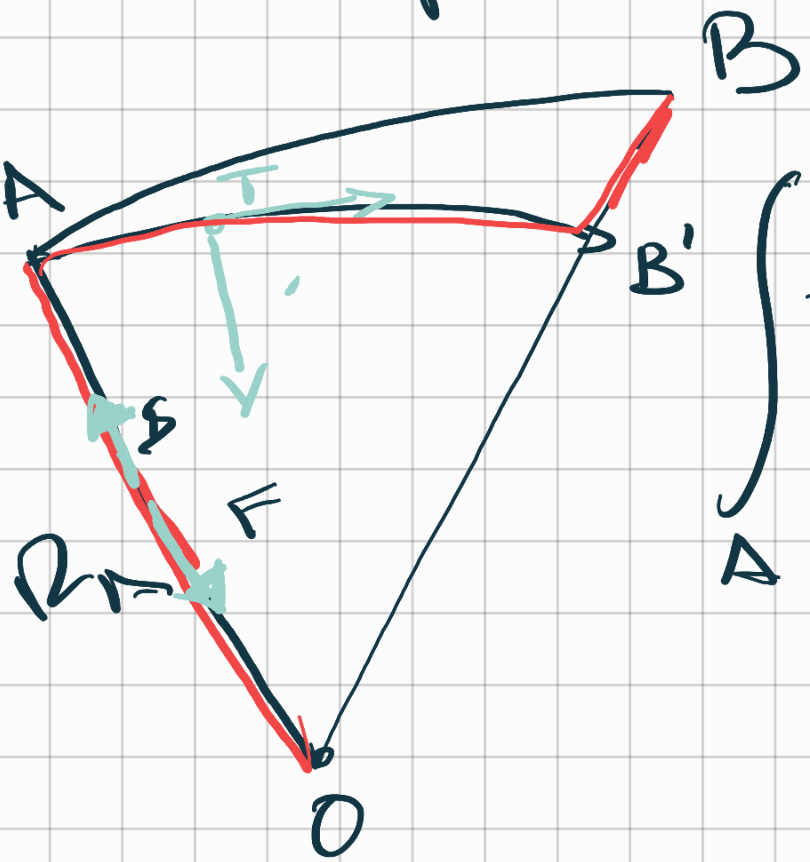
$$= \frac{4\pi^2 r^{\cancel{2}}}{T^2} \cdot \frac{1}{\cancel{r}}$$

$$= \frac{4\pi^2 r}{T^2} = \frac{4\pi^2 r}{T^2} \cdot \frac{r^2}{r^2}$$

$$= \frac{4\pi^2}{r^2} \frac{r^3}{T^2} = G$$

$$\frac{4\pi^2}{r^2} G$$

$$\vec{F} = -M \frac{4\pi^2}{r^2} G$$



$$\int_A^B \vec{F} \cdot d\vec{s}$$

$OA + AB' + B'B$

$$\int_A F\, ds = F\, ds \cos 90$$

$$\int^{A} \quad \int^{B'} \quad \int^{B}$$

$$\int_0 F\,ds + \int_A F\,ds + \int_B F\cdot ds$$

$$-\left[F\,ds\right]_0^A + \left[F\,ds\right]_B^{B'} =$$

$$-\left[\frac{C}{r}\right]_A^B = -\frac{C}{r_A} - \frac{C}{r_0} -$$