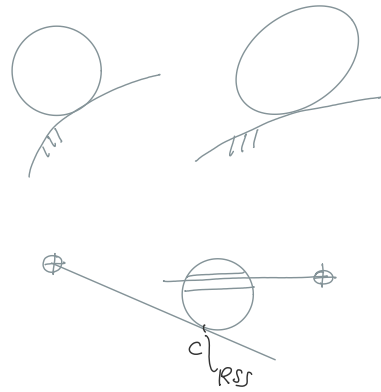
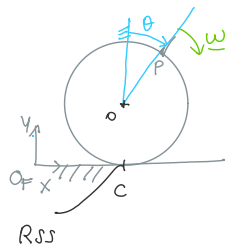


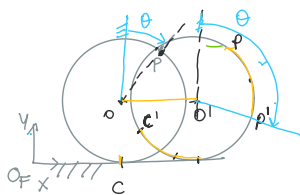
RSS



•) RSS $\Rightarrow C \equiv C_v \Rightarrow \underline{v}_C = \underline{0}$

•) RSS \Rightarrow gde?

corpo libero \Rightarrow 3 gde $\Rightarrow (\theta, x_0, y_0)$
 RSS \Rightarrow ?



$$\begin{aligned} x_0 = r\theta &\Rightarrow -1 \text{ gde} \\ y_0 = r \cos \theta &\Rightarrow -1 \text{ gde} \\ &\underline{\underline{-2 \text{ gde}}} \end{aligned} \quad \left. \vphantom{\begin{aligned} x_0 = r\theta &\Rightarrow -1 \text{ gde} \\ y_0 = r \cos \theta &\Rightarrow -1 \text{ gde} \end{aligned}} \right\} + 1 \text{ gde} \Rightarrow \theta$$

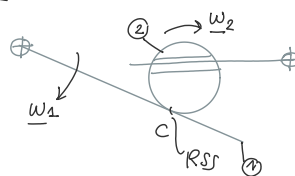
$$\begin{cases} \underline{v}_C = \underline{0} \\ \underline{a}_C = \underline{a}_{Cv} = -D\omega^2 \underline{n} \end{cases}$$

1° caso



$$\frac{1}{D} = \frac{1}{R_f} - \frac{1}{R_m}$$

2° caso



$$C = C_{12}$$

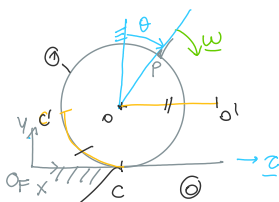
$$\underline{v}_{C1} = \underline{v}_{C2}$$

$$\underline{a}_{C1} \neq \underline{a}_{C2}$$

$$\underline{a}^{rel} = -D\omega_{rel}^2 \underline{n}$$

$$\underline{\omega}_{rel} = \underline{\omega}_2 - \underline{\omega}_1$$

RCS



$R\omega$

•) $\underline{v}_c \neq \underline{v}_c \Rightarrow \underline{v}_c \parallel \underline{tg} , \underline{v}_c = \underline{v}_c \underline{e}$

•) $\Rightarrow (x_0, y_0, \theta)$

$\hookrightarrow y_0 = \cos t \Rightarrow -1 g d l$

$\rightarrow x_0 \neq r\theta \Rightarrow \left. \begin{matrix} x_0 \\ \theta \end{matrix} \right\} \Rightarrow +2 g d l$

Osservare.

•) dove sta c_v ?

$$\begin{cases} \underline{v}_0 = \dot{x}_0 \underline{i} \\ \underline{a}_0 = \ddot{x}_0 \underline{i} \end{cases}$$

$$\begin{aligned} \underline{v}_c &= \underline{v}_0 + \underline{\omega} \wedge \underline{r} \\ &= \dot{x}_0 \underline{i} - \dot{\theta} r \underline{i} \\ &= (\dot{x}_0 - \dot{\theta} r) \underline{i} \end{aligned}$$

$\underline{v}_c = \underline{v}_c \underline{e} = \dot{s}_0 \underline{e}$ (✓)

$\underline{a}_c = \ddot{s}_0 \underline{e} + \frac{\dot{s}_0^2}{\rho_c} \underline{n}$ (✓)

$\underline{v}_0 = \dot{s}_0 \underline{e}$ (✓)

$\underline{a}_0 = \ddot{s}_0 \underline{e} + \frac{\dot{s}_0^2}{\rho_0} \underline{n}$ (✓)

$(R+r)$

