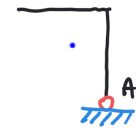


VINCOLI ESTERNI E CENTRI DI ROTAZIONE

CERNIERA

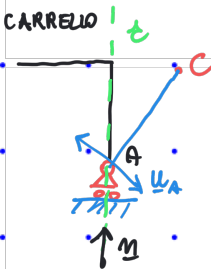


$$\underline{u}_A = \underline{0}$$

$$\underline{u} \neq \underline{0} \Rightarrow C = A$$

centro

CARRELLIO



$$\underline{u}_A \cdot \underline{m} = 0$$

$$\underline{u} \neq \underline{0} \Rightarrow C \in t$$

Dimu:

Assurdo $\underline{u} \neq \underline{0} \Rightarrow C \notin t$

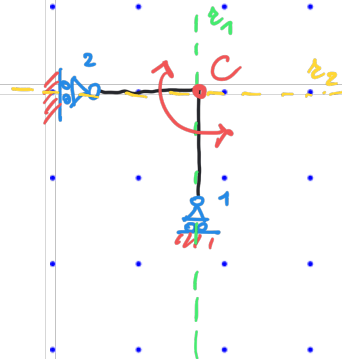
$$\underline{u}_A \cdot \underline{AC} = 0$$

$C \notin t \Rightarrow \underline{u}$ e \underline{AC} non sono paralleli.

\underline{u}_A è ortogonale a due vettori non paralleli.

(nel piano) $\Rightarrow \underline{u}_A = \underline{0}$

CONCLUSIONE: se $\underline{u} \neq \underline{0}$ allora $C \in t$

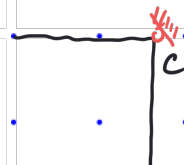


$$\underline{u} \neq \underline{0}$$

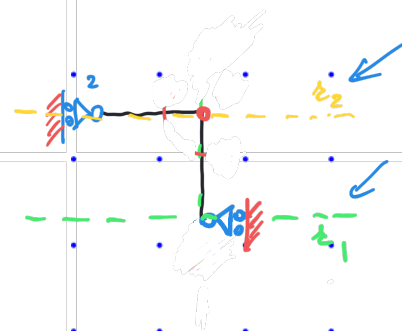
comp. su i

vincol. 1 e 2

allora $C \in t_1 \cap t_2$



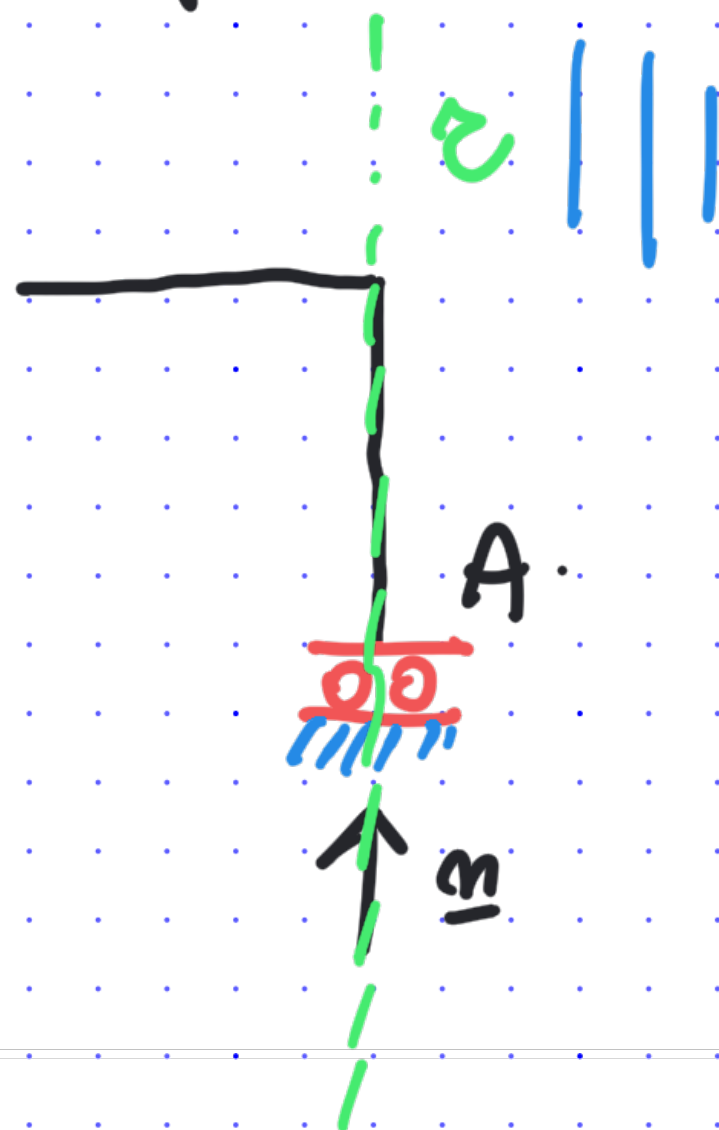
rotazione attorno a C



traslazioni

C

Glifo



$$\underline{u} \cdot \underline{n} = 0$$

$$\mathcal{J} = 0$$

\Rightarrow C è
improprio
(\underline{u} è una
traslazione)

Il glifo allinea il centro C nel punto
improprio dove si intersecano le rette
parallele a \underline{u} (\underline{z})