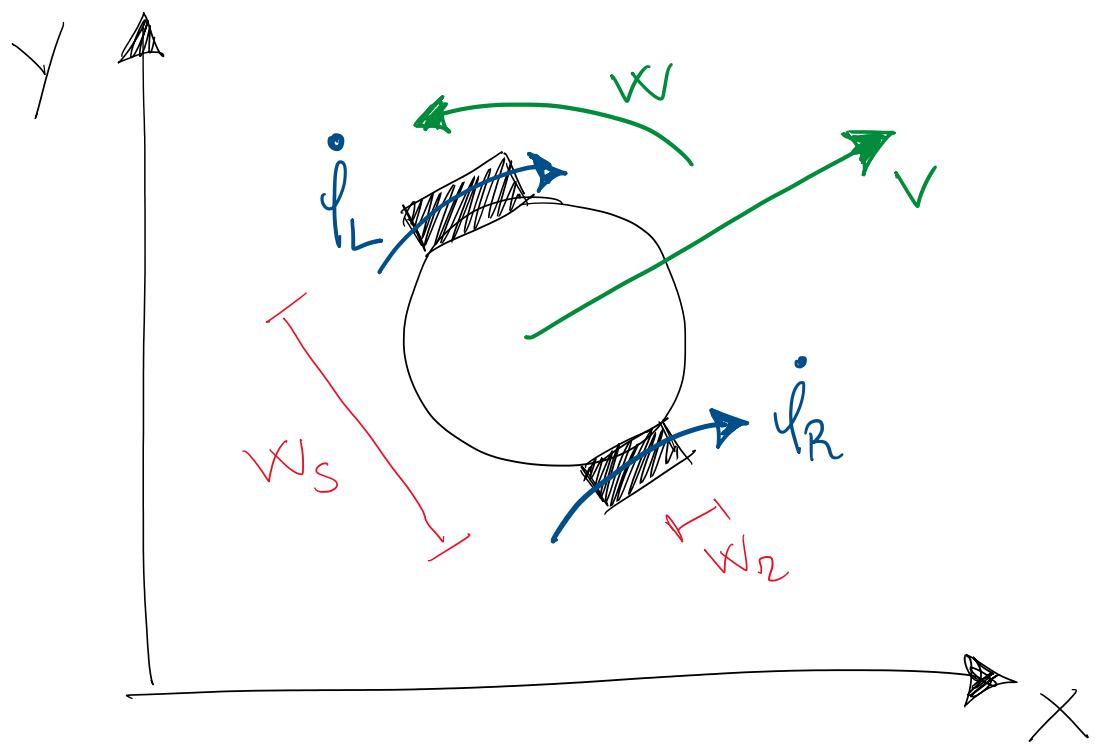
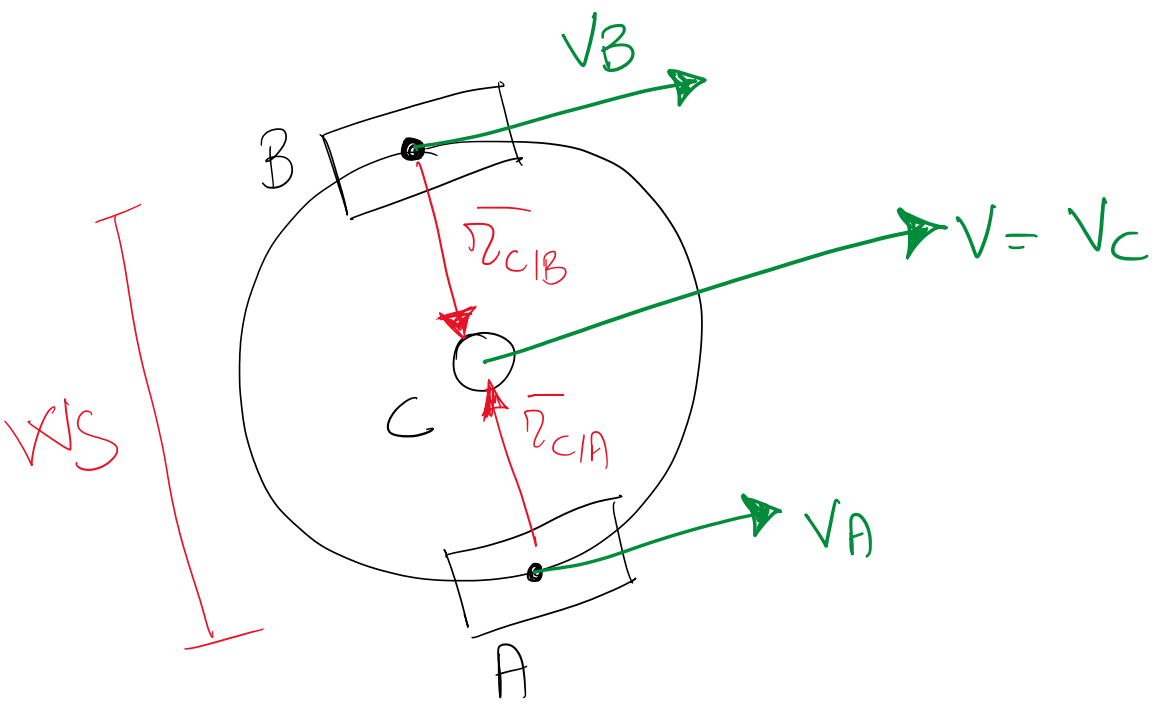
L58 Linear Velocity

martedì 14 marzo 2023 16:06





$$\begin{cases} V_A = W_2 \dot{\varphi}_R \\ V_B = W_2 \dot{\varphi}_L \end{cases} \longrightarrow V_C \; ?$$

$$\begin{cases} \bar{V}_C = \bar{V}_A + \bar{W} \times \bar{r}_{C|A} \\ V_C = \bar{V}_B + \bar{W} \times \bar{r}_{C|B} \end{cases}$$

+

0

$$2V_C = V_A + V_B + W \times (r_{C|A} + r_{C|B})$$

$$V_C = \frac{V_A + V_B}{2}$$

$$V = \frac{W_2 \dot{\varphi}_R}{2} + \frac{W_2 \dot{\varphi}_L}{2}$$