

$$L-7 \quad \vec{U}_{12} = \vec{V}(\vec{I} \in S_1) - \vec{V}(\vec{I} \in S_2)$$

$$\begin{aligned} \vec{V}(\vec{I}_2) &= \vec{V}(O) + \Omega_{S_2} \wedge C\vec{I}_2 \\ &= \dot{m}_2 \vec{t}_0 + \dot{\theta} h \vec{e}_n - R \vec{j}_0 = (\dot{m}_2 + R\dot{\theta}) \vec{t}_0 \end{aligned}$$

$$\vec{V}(\vec{I}_1) = \dot{m}_1 \vec{t}_0$$

$$\vec{U}_{12} = (\dot{m}_1 - (\dot{m}_2 + R\dot{\theta})) \vec{t}_0$$

condition de roulement sans glissement.

$$CRS G \Rightarrow \vec{U}_{12} = \vec{0} \Rightarrow \dot{m}_1 - \dot{m}_2 - R\dot{\theta} = 0$$

$$\dot{m}_1 - \dot{m}_2 = R\dot{\theta}$$