Rigid body dynamics

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + \boxed{2\vec{\omega}_{ib} \times \frac{{}^b d}{dt}\vec{r}} + \boxed{\vec{\alpha}_{ib} \times \vec{r}} + \boxed{\vec{\omega}_{ib} \times (\vec{\omega}_{ib} \times \vec{r})}$$

Rigid body dynamics

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + \boxed{2\vec{\omega}_{ib} \times \frac{{}^b d}{dt}\vec{r}} + \underbrace{\vec{\alpha}_{ib} \times \vec{r}} + \boxed{\vec{\omega}_{ib} \times (\vec{\omega}_{ib} \times \vec{r})}$$

- Transversal acceleration

Rigid body dynamics

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + 2\vec{\omega}_{ib} \times \frac{{}^b d}{dt}\vec{r} + \vec{\alpha}_{ib} \times \vec{r} + \vec{\omega}_{ib} \times (\vec{\omega}_{ib} \times \vec{r})$$

- Transversal acceleration
- Centripetal acceleration