## Rigid body dynamics

• Coriolis acceleration <

$$ec{a}_p = ec{a}_o + rac{^b d^2}{dt^2} ec{r} + rac{^b d}{2 ec{\omega}_{ib} imes rac{^b d}{dt} ec{r}} + rac{ec{lpha}_{ib} imes ec{r}}{ec{\omega}_{ib} imes ec{r}} + ec{ec{\omega}_{ib} imes ec{r}})$$

## Rigid body dynamics

• Coriolis acceleration <

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

• Transversal acceleration



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## 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



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