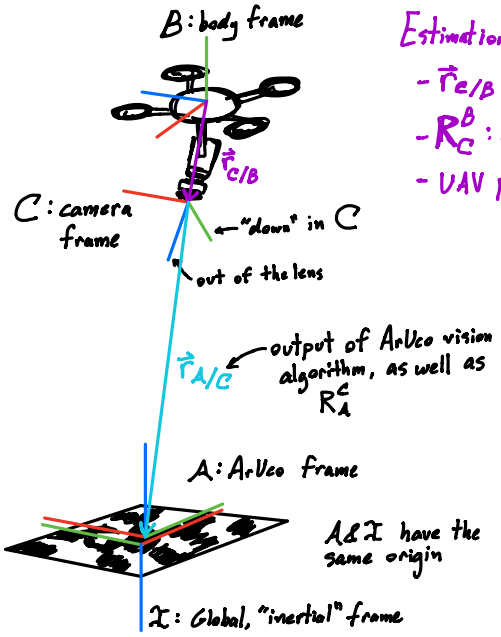
x y z



Estimation output:

- $\vec{r}_{C/B}$: translation between camera and UAV body frame
- R_C^B : rotation between camera and UAV body frame

} modeled as biases in the estimation

- UAV position and orientation, expressed in $\mathcal{I}$

Estimation Overview

1. Predict using IMU measurements and quadrotor dynamic model (expressed in $\mathcal{B}$)
   - IMU measurements received in $\mathcal{I}$, transformed to $\mathcal{B}$
   - Force inputs expressed in $\mathcal{B}$
2. Update using $\vec{r}_{A/C}$ and R_A^C (ArUco outputs)