

Assignment 9: Due March 25, 2010.

Problem 1. Determine the RHS $\hat{\gamma}^\alpha$ of the acceleration equation in the $\mathbf{r} - \mathbf{p}$ formulation, where $\alpha \in \{DP1, DP2, D, CD\}$ (see the class notes of March 16).

Problem 2. Extend the MATLAB code you have implemented so far to support the computation of the RHS $\hat{\gamma}^\alpha$ of the acceleration equation in the $\mathbf{r} - \mathbf{p}$ formulation, where $\alpha \in \{DP1, DP2, D, CD\}$.

Problem 3 [BONUS PROBLEM]. Obtain the matrix form of the EOM for a system of rigid bodies when using the set of Euler Angles as the generalized coordinates that capture the orientation of each rigid body in the system.