Week 2 - #1

Dynamics of a System of Particles (II)

Today: Ch 9.1-9.5

Next Class: Ch 9.11, 9.6

Ji-hoon Kim (Seoul National University)
1. Diagonalize the matrix $A$ below (i.e., transform the coordinate so that it leaves only the diagonal elements), by first finding the eigenvalues and eigenvectors of $A$.

$$A = \begin{bmatrix}
1 & 2 & 0 \\
0 & 3 & 0 \\
2 & -4 & 2
\end{bmatrix}$$

2. What are the weak and strong form of Newton’s 3rd law?
3. Thornton & Marion, Problem 9-5.