

Advanced Construction Materials

Homework #5

Due: June 11th at 6 pm (Final exam time)

Note: Submit your homework (scanned or electronically documented) to my email address of juhyukmoon@snu.ac.kr before deadline.

1. For a linear chain in which the alternate atoms have mass m_1 and m_2 ($m_1 \gg m_2$), and only nearest neighbor interaction K , make a plot of vibrational frequencies. Also discuss about the change of frequencies when $m_1 = m_2$. **(20pt)**
2. Image processing project. Send your results with your Matlab code. **(80pt)**