Reading Assignment #30

Announcement: This Friday, Nov. 10, we meet 3-4 pm instead of 9-10 am

Read: Taylor §11.1 & §11.2

1. In which sense is chapter 11 more complicated than chapter 5? What is the main equation of motion?

2. What are normal frequencies and normal modes?

3. Monday we will decide on which project each one of you is working on for the last week of classes (see below). For this decision skip Ch 14, Ch 15, and Ch 16. In case you had special relativity with four-vectors already in another class your choices will be Ch 14 & Ch 16 only. Depending on the difficulty of sections you will work on three or four sections of the chapter of your choice. As answer to this question, please let me know which chapter you would like to work on.

4. Comments: What of this reading did you find most difficult and what did you find most interesting? Is there a specific topic you would like to focus on, on Friday in class? Do you have any other comments or wishes?

Project

During the last week of classes (Nov. 26 – 30) you will give talks. Each student will have about 25 min to present assigned sections of Taylor's chapters 14 – 16. Part of the project are:

- 25 min talk (should include one small example to teach class how to do problems of presented subject)

- A paper (about half a page) in which you summarize an example of active research in the area of your project. For finding an research example use web of science. You may also other faculty at Bucknell. A web page is not sufficient as reference, instead you need at least one research publication. Please let me know which example you will choose as soon as possible, so that we avoid overlap.

- Include a very short version of this research example in your 25 min talk.