Project 2

- Project description:
  - ◇ Pick up a pendulum model from any section between 10 and 27 except 21 in Chapter 12.
  - ◇ Use the routine **ode45.m** to solve your problem.
  - ◇ You will earn up to 10 extra points if you choose to work on the more complicated models, i.e., sections 12, 15, 18, 19, 20, 24.
  - ◇ Follow the *Project Format* closely.
  - ◇ The physics involved may be beyond your comprehension. Try to understand at least what each of the dependent variables stand for. For example, what do the four variable y_1, y_2, y_3 and y_4 stand for in our double pendulum model stand for? Predict the behavior of the pendulum after initializing these values. Play with the pendulum by altering these values.
- Due date:
  - ◇ Before 3:00pm on April 13.
- Report:
  - ◇ All projects need to by typeset. All graphs must be plotted by computers.
  - ◇ Hand-written report or drawings will *not* be graded.
- Extra remarks:
  - ◇ The next project (Project 3) is due on Thursday, May 4. You only have three weeks after this project is due. We shall be working on the "performance evaluation." Start earlier. You will not have any extra time.
  - ◇ No final exam will be given. Your projects determine your grades.