

Submitting Programming Assignments

- Submission:
- **Submissions must come from your account on the matlab machines!**
 - Submit only the source code, not the executable
 - Programs will be submitted via email to phy277@mail.astro.sunysb.edu using the Un*x mail command (do not submit the program as an attachment)
 - Example (what you type is in blue, prompt is in black, output is in red):

```
>mail phy277@mail.astro.sunysb.edu
Subject: program # 1
~r position.f90
"position.f90" 20/415
.
Cc:
>
```
- Practice submitting by emailing program to yourself!
- If you have doubts see the instructor or course TA

Rules for ALL Programming Assignments

- Write the program yourself!
 - Assignments are not team efforts. All work must be done only by you alone.
 - Be prepared to verbally defend your work so that you can prove that it is yours!
 - Any instances in which plagiarism is suspected will be turned over to the academic judiciary
 - Protect your directory by issuing the command “`chmod og-rwx .`” in your home directory. This will prevent others from reading or copying your work. If you have any doubts about this step see the instructor or course TA
- All programs must contain the IMPLICIT NONE statement
 - Those that do not we receive a zero grade
- All programs must contains a block of comment statements in the beginning that explicitly states:
 - Your name
 - Programming assignment #
 - Purpose of the program
 - Date
 - Any other information that you think should be there (see examples in notes & textbook for inspiration!)

Programming Assignment #10

- Due 5:00PM 12/14/2007
- Problem 1: Write a program in C++ to integrate a coupled set of ODEs using the 4th order Runge-Kutta method. You should apply this code to the orbital problem discussed in the previous lectures and and integrate the equations for three years using a timestep of 1 week. Produce an encapsulated postscript plot of the orbits you obtain using your code. This plot will be used in Problem 2.
- Using LaTeX, produce a document of at least one page explaining your results from Problem 1. The document should show a plot of the orbits and explain how the 4th order R-K method compares to other methods we have discussed. You may show results from other methods if you desire to do so. The document should be made available as a postscript or PDF file on your matlab home page. Submit the URL to that page via email.