

PHYS 305
Computational Physics II

Assignment # 2
Due: Friday, February 5, 2016

Purpose: Practice solving ODEs using RK4 and acquire an intuition for scattering problems.

Part A Adapt the RK4 solution of the mass-on-a-spring to solve for a scattering trajectory. This was started (finished) in class.

Part B

Perform tests to check the correctness of the code and the accuracy of the solution.

Part C

Solve the **zooming** exercises found in the WWW course pages. Interpret what you see.

PS: Answering the questions above should amount to solving the exercises #1 to #5 in the WWW pages.