

Physics 125c
Problem set number 4
Due Wednesday, April 28, 2004

Notes about course:

- There is a web page for this course, which should be referred to for the most up-to-date information. The URL:
<http://www.hep.caltech.edu/~fcp/ph125/>

READING: Read sections 8–10 of the “Scattering” course note.

PROBLEMS:

13. In the notes we derived the optical theorem assuming that we had a “symmetric central force”. Show that this assumption is unnecessary. Hint: This is trivial, except for one piece of the assumption which you will have to retain.
14. Do exercise 7 of the “Scattering” course note.
15. Do exercise 8 of the “Scattering” course note.
16. Do exercise 9 of the “Scattering” course note.