

Physics 129b
Problem Set Number 7
Due Wednesday, February 27, 2008

Reading: If you are interested in delving deeper into the theory of angular momentum and the $SU(2)$ group, you may read chapter 8 of Wu-Ki Tung. In any event, finish reading the note on Lie Groups and Lie Algebras linked to the web page.

27. Exercise 14 of the note on Representation Theory, linked to the Ph 129 web page.
28. Do exercise 2 of the note on Lie Groups and Lie Algebras, linked to the Ph 129 web page.
29. Do exercise 3 of the note on Lie Groups and Lie Algebras, linked to the Ph 129 web page.
30. Group algebras: Do exercise 5 of the note on Lie Groups and Lie Algebras, linked to the Ph 129 web page.
31. The “Baker-Campbell-Hausdorff theorem”: Do exercise 6 of the note on Lie Groups and Lie Algebras, linked to the Ph 129 web page.