

Physics 7314/7360

Homework 9

Due Fri, Nov 9

3 Nov 2007

1. Read in A&H: the rest of Ch 9, Ch 11, and Appendix M through M4.2. (We won't cover much of Ch 11 in lecture, but get as much out of the reading as you can.)

True/False: I read this material.

2. AH 8.4

3. Show that for the Dirac Lagrangian to be Hermitian,  $\gamma^0$  must be Hermitian, and the three spatial  $\gamma^i$  must be anti-Hermitian. Then solve AH 8.7 (using this result, or some other method).

4. AH 8.8

5. AH 4.15