

Quantum Mechanics I, Problem Set 5

Due Wednesday October 19 in class

1. Townsend Chapter 3, Problem 5.
2. Townsend Chapter 3, Problem 15.
3. Townsend Chapter 3, Problem 16.
4. Townsend Chapter 3, Problem 17.
5. Townsend Chapter 3, Problem 18.
6. Townsend Chapter 3, Problem 20. Use the result of Problem 19.
7. Townsend Chapter 4, Problem 2.
8. Find matrices representing S_x , S_y , S_z , and S^2 for total angular momentum $j = \frac{3}{2}$, and verify that your matrices satisfy the commutation relations.

Schedule Changes:

Thursday October 13 1-1:50 pm in 361 will be a lecture rather than a conference.

Monday October 17: JHU fall break day, no class.

Tuesday October 18 9-9:50 in 278 will be a conference rather than a lecture

Wednesday October 19 9-9:50 in 278: Guest lecturer Prof. Zlatko Tesanovic.