

**Physics 521 – Graduate Quantum Mechanics
Final Project**

Rough Draft due Wednesday, April 9, 2008 at 8:30 a.m.

Final Draft due Wednesday, April 30, 2008 at 8:30 a.m.

Note: The final project is worth 200 points, roughly 3 problem sets.

1. Reading

Choose from G&Y Ch. 12 or Ch. 13.

2. Conceptual Analysis

Present an 8 to 10 page write-up of your understanding of either the interpretation of quantum mechanics or relativistic quantum mechanics. List in your bibliography (not included in the 8-10 page requirement) G&Y and an additional three resources which you read thoroughly (if a text, name the chapter/section). At least one of the three resources must be a research article. You must use single spaced 12 pt. latex standard font with no more than 30 single line equations in order to receive credit. Figures are allowed but go outside your 8-10 page requirement. This section must be complete by the rough draft due date.

3. Quantitative Analysis

Invent a problem in your chosen area which is comparable to a long homework problem from this course. You must propose this problem by the time the rough draft is due. I will either agree to the problem proposed or give you an alternate if your proposal is too difficult or easy compared to course standards. This problem must be solved by the final draft and any rewriting of the conceptual analysis must be complete in order to receive full credit.