

Expectations: I expect that you read the appropriate materials in Sakurai before coming to class. Limited class time will prevent us from discussing all details of some important derivations and/or proofs. In such cases I will refer to the textbook and expect you to be able to recreate the material as if it were covered in class.

- Outline:**
- I. Fundamental Concepts
 - Stern-Gerlach experiment, vector spaces, Dirac notation, operators and observables, change of basis, wave functions.
 - II. Quantum Dynamics
 - Time evolution, Schrödinger and Heisenberg representation, SHO, Schrödinger equation, Feynman path integrals, gauge transformations
 - III. Angular Momentum
 - Rotations, orbital angular momentum and spin, tensor operators
 - IV. Symmetry
 - Parity, time reversal
 - V. Identical Particles
 - Permutation symmetry, atom and molecules, quantum statistics

DSS: The University is committed to providing students with documented disabilities equal access to all university programs and facilities. If you think you have a disability requiring accommodations, you must register with Disability Services for Students (DSS). Contact DSS at 603-862-2607. If you have received Accommodation Letters for this course from DSS, please provide me with that information privately, in my office, so that we can review those accommodations.