# PHY-512: Quantum Mechanics II

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### Outline

- 1. Continuous symmetries
- 2. Discrete symmetries C,P,T
- 3. Hydrogen problem
- 4. Perturbation theory
- 5. Variational approach
- 5. Many particle systems
- 7. Scattering Theory
- 8. Dirac equation

### Reference Material

J. Sakurai, Modern Quantum Mechanics, ed. Adison wesley

### Grade

The grade will be:  $\operatorname{Hw}(1/3) + \operatorname{Mid}(1/3) + \operatorname{Fin}(1/3)$ 

### Grader

TBA