PHYS 70008
Quantum Mechanics II

Continuation of Quantum Mechanics I.

- Symmetries and conservation laws
- Bose-Einstein and Fermi-Dirac statistics
- Elementary approximation methods
- Scattering theory
- Realistic hydrogen atom
- Advanced approximation methods
- Partial wave expansions
- Optical theorem
- Introduction of Feynman rules
- Relativistic quantum mechanics and the Klein-Gordon theorem

Level:

- Graduate students: Core requirement.

Offered: Every spring

Text: *Modern Quantum Mechanics* (Revised Edition) by J. J. Sakurai