PHY 602 QUANTUM MECHANICS, 1-3-0-9
Department of Physics IIT Kanpur
Instructor: Joydeep Chakrabortty

Course Contents:

1. Fundamental concepts, Hilbert space formalism for quantum mechanics; (8)
2. Symmetries in quantum mechanics; theory of angular momentum; (6)
3. WKB approximation, perturbation theory; (8)
4. Scattering; (6)
5. Relativistic Quantum Mechanics; (6)
6. Quantum Information (6)

In this course we will discuss the theory parts very briefly. We will aim to solve more and more problems which is the main purpose of this course
(3 Tutorials + 1 lecture per week).

N.B. This course has been designed for the new PhD students as part of their pre-PhD course works. This I strongly discourage all the students who have done or are doing PHY431, PHY432 courses.

Refs:
1. J J Sakurai, Modern Quantum Mechanics, and Advanced Quantum Mechanics
2. R Shankar Principles of Quantum Mechanics