

Introduction to Quantum Mechanics II

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Introduction

- Quantum Mechanics II
- Byungjoon Min (S1-1-203), bmin@chungbuk.ac.kr
- Mon 2-3 (S1-1-336) and Tue 2 (S1-1-245)
- Textbook: Introduction to Quantum Mechanics, David J. Griffiths, Prentice Hall, 2nd edition (1995).
- Prerequisites: (essential) Quantum Mechanics I, (recommended) Classical Mechanics, Electrodynamics, and Mathematical Physics.

- Announcement and other communication will be through:
- <http://statphys.chungbuk.ac.kr/doku.php?id=2018qm2>
- Check regularly!

Course Objectives

By the end of the course, you are expected to be able to understand

1. Formalism: the general structure of quantum mechanics
 - Vector spaces, operators, eigenfunctions, and Dirac notation
2. Quantum mechanics in three dimensions
 - Central potential, Hydrogen atom, angular momentum, and spin
3. Many particle systems
 - Identical particles, atoms, solids, and quantum statistical mechanics
4. Perturbation theory
 - Time independent perturbation theory and the Zeeman effect
5. (optional) Interpretation of quantum mechanics

Two options:

1. mid 20 %, final 30 %, assignments 40 %, and attendance 10 %.
2. final 30 %, assignments 60 %, and attendance 10 %.

Any questions?

Where to go next...

Let us go back to Quantum Mechanics I.