

Winter Term 2023/2024

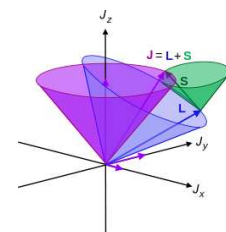
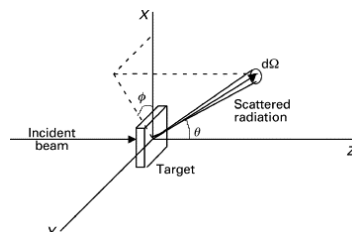
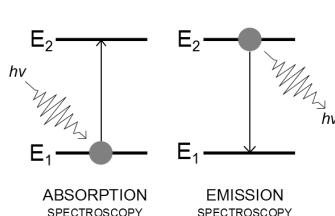
Quantum Mechanics II

Lec.: Mo, 11.45 & Thu, 13.45; Ex.: Wed, 8.15 @ 46-576

First Lec.: October 23, 2023; First Ex.: October 25, 2023

Contents:

- Quantum mechanics I: harmonic oscillator, hydrogen atom
- Time-independent perturbation theory: Brillouin-Wigner method
- Time-dependent perturbation theory: absorption and emission of radiation
- Scattering theory: scattering amplitude and cross-section, Rutherford scattering
- Addition of angular momenta: Clebsch-Gordan coefficients, Landé factors
- Relativistic wave equations: Klein-Gordon and Dirac equation, hydrogen atom



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