

Winter Term 2022/2023

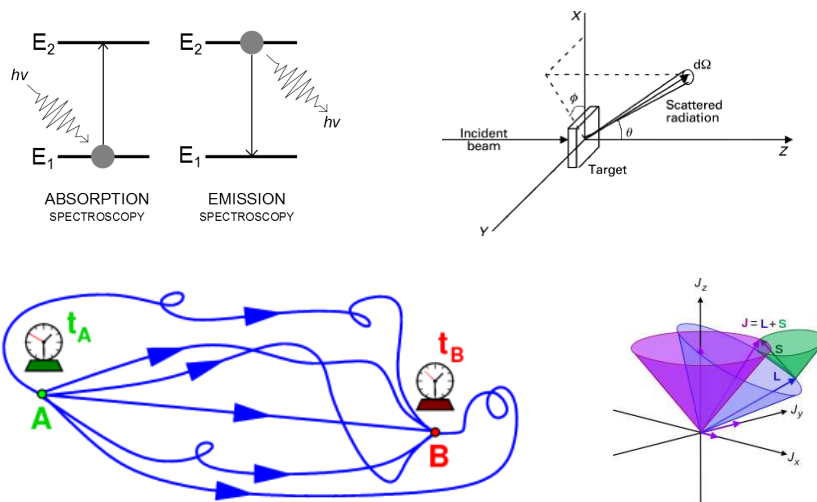
Quantum Mechanics II

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

First Lec.: October 24, 2022; First Ex.: October 26, 2022

Contents:

- 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
- Path integral description of quantum mechanics: free particle, harmonic oscillator
- Addition of angular momenta: Clebsch-Gordan coefficients, Landé factors
- Relativistic wave equations: Klein-Gordon and Dirac equation



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