

LECTURE 6 SCHRÖDINGER EQUATION FOR H ATOM

I. Schrodinger equation in spherical coordinates

- A. Hamiltonian operator
- B. Potential energy, $U(r)$

II. Hydrogen Atom

- A. Binding energy, E_n
- B. Quantization
- C. n quantum number

III. Verification of Energy Levels for H Atom

- A. Photon emission
- B. λ of transitions between two states
- C. Photon absorption