

LECTURE 5 MATTER AS A WAVE

I. Electron Diffraction Experiment (1927)

- A. Wave-like properties of e^- s
- B. Calculating λ from θ
- C. de Broglie wavelength for matter waves

II. Schrödinger's Equation

- A. Equation of Motion for Matter Waves
- B. Derivation of Schrödinger Equation
 - 1. Wavefunction
 - 2. Energy
 - 3. de Broglie wavelength
 - 4. Hamiltonian operator