Topics:

- Heisenberg uncertainty principle
- Tunneling
- Hydrogen atom
- Pauli principle
- Hund’s rule

Summary:

- Heisenberg: impossible to measure x and p or ω and t simultaneously
- Wave can tunnel through barrier: transmission and reflection
- Hydrogen:
  - Energy states characterized by 4 quantum numbers (n: shell, l: subshell), $E_n \sim 1/n^2$
  - Wave functions: orbitals
- Pauli principle: no 2 electrons have identical quantum numbers