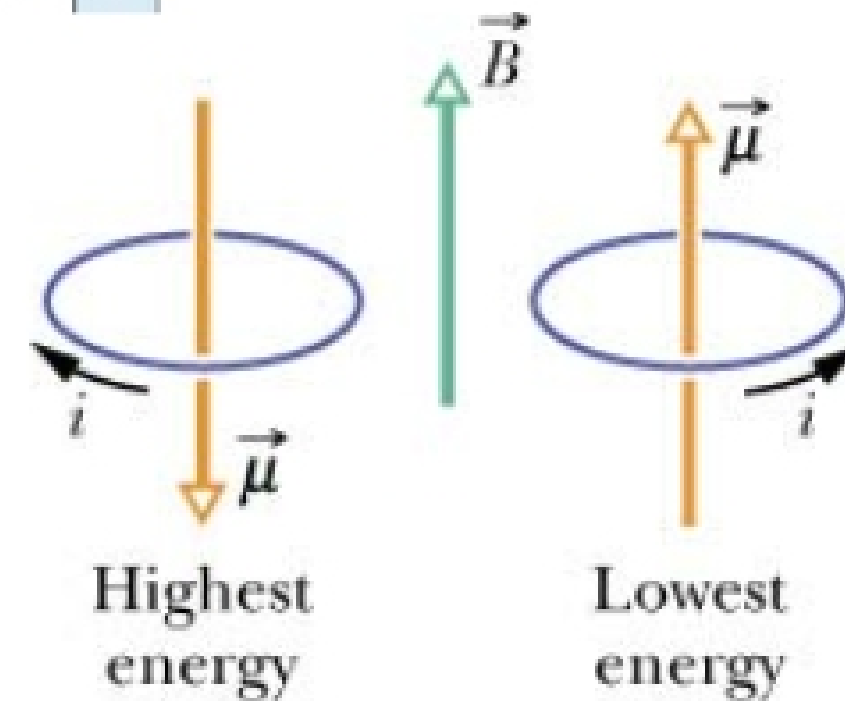
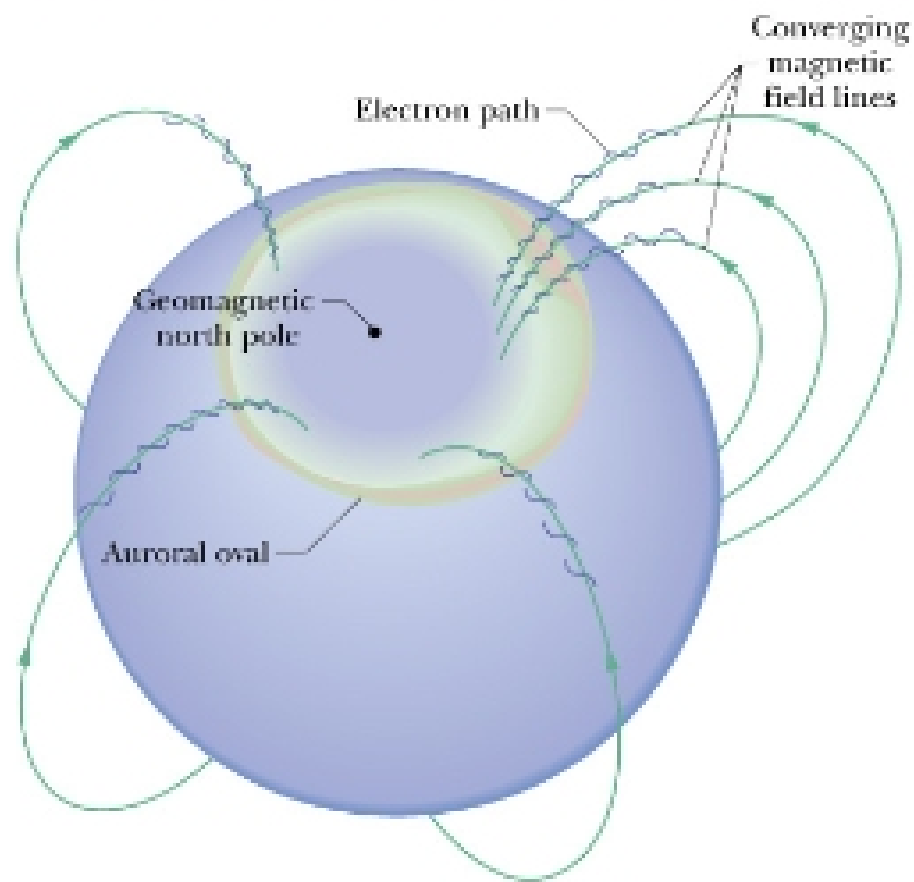
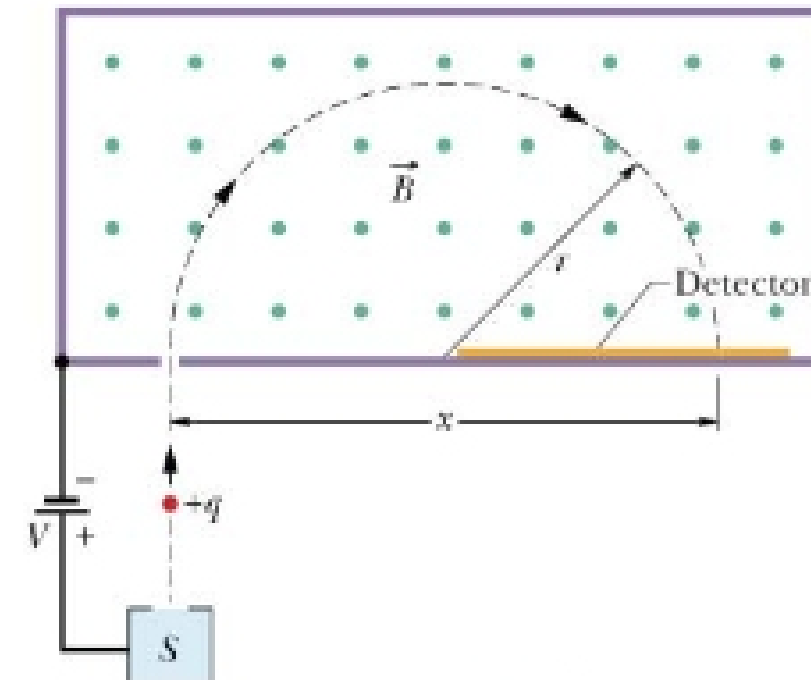
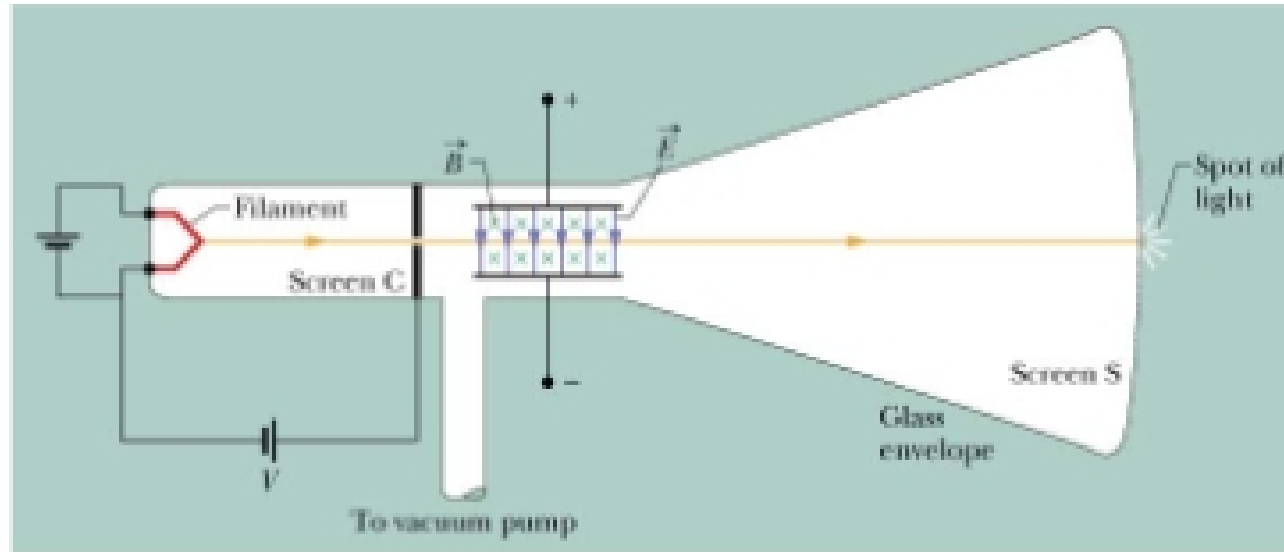


Chapter 19: Magnetic Fields



Magnetic Fields

→ Magnetic field (units, field lines)

- ◆ Magnetic field of the earth and other astronomical objects

→ Effects of magnetic fields on charges and currents

- ◆ Force on a moving charge
- ◆ Force on a current
- ◆ Torque on a current loop
- ◆ Path followed by particle in magnetic field

→ Generating magnetic fields

- ◆ Long wire
- ◆ Current loop
- ◆ Solenoid

→ Instruments

- ◆ Mass spectrometers
- ◆ Cyclotrons and synchrotrons

Reading Quiz

→ The magnetic force on a moving charged particle is:

- ◆ (1) Perpendicular to the velocity
- ◆ (2) Parallel to the velocity
- ◆ (3) Parallel to the B field
- ◆ (4) Independent of the velocity
- ◆ (5) None of the above