### Electric and Magnetic Forces on Point Charge

#### Electric Force
- \( \vec{F} = q \vec{E} \)
- Electric force is parallel to electric field
- SI unit of \( E \): 1N/C=1V/m

#### Magnetic Force
- \( \vec{F} = q \vec{v} \times \vec{B} \), \( F = qvB \sin \phi \)
- Magnetic force is perpendicular to magnetic field
- SI unit of \( B \): 1Ns/Cm=1T (Tesla)
- 1T=10⁴G (Gauss)