

Recall Coulomb's Law

- Magnitude of the force between charges q_1 and q_2 separated a distance r :

$$F = k q_1 q_2 / r^2 \quad k = 9 \times 10^9 \text{ Nm}^2/\text{C}^2$$

- Force is
 - attractive if q_1 and q_2 have opposite sign
 - repulsive if q_1 and q_2 have same sign
- Units:
 - q 's have units of Coulombs (C)
 - charge on proton is $1.6 \times 10^{-19} \text{ C}$
 - r has units of m
 - F has units of N