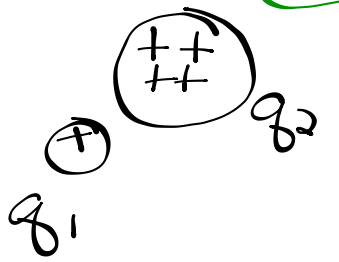
CHARGE!
+

Q_1

$E_1 = E_2$



~~$E_1 > E_2$~~

~~$E_2 > E_1$~~

Q_2

CHARGE!
−

Electrostatic force:

- Measured in Newtons
- Exists between two charged particles
- Attractive/repulsive
- $F = k\frac{q_1 \cdot q_2}{r^2}$

Electric fields:

- Measured in N/C
- Exists because of one charge
- Have one direction and one magnitude (at a given position)
- $E = \frac{F}{q}$ q = charge of a theoretical particle in the field

Electric Potential

- How much work an electric field can do
- Measured in volts

Electric field:

$$E = \frac{F}{q}$$

$$F = k\frac{Qq}{r^2}$$

$$E = \frac{k\frac{Qq}{r^2}}{q} = k\frac{Q}{r^2}$$

$$E = k\frac{Q}{r^2}$$