

Coulomb's Law

Our notation:

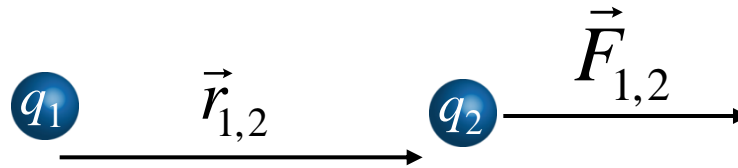
$\vec{F}_{1,2}$ is the force by 1 on 2 (think "by-on")
 \hat{r}_{12} is the unit vector that points from 1 to 2.

$$\vec{F}_{1,2} = \frac{kq_1q_2}{r_{1,2}^2} \hat{r}_{1,2}^2$$

"I would like to know what the r with a carrot sign means at the end of Coulomb's law means."

Examples:

If the charges have the same sign, the force **by** charge 1 on charge 2 would be in the direction of r_{12} (to the right).



If the charges have opposite sign, the force **by** charge 1 on charge 2 would be opposite the direction of r_{12} (left).

