FUERZA Y CAMPO ELÉCTRICO

$$\vec{F} = \frac{1}{4\pi\epsilon_0} \frac{QQ_1}{|\vec{r}|^2}\hat{r}$$

$$\vec{F} = \frac{1}{4\pi\epsilon_0} \frac{QQ_1}{|\vec{r}-\vec{r}_1|^2}\hat{r}$$

$$\vec{F} = \frac{1}{4\pi\epsilon_0} \frac{QQ_1}{|\vec{r}-\vec{r}_1|^2}\left(\frac{\vec{r}-\vec{r}_1}{|\vec{r}-\vec{r}_1|}\right)$$

$$\vec{F} = \frac{1}{4\pi\epsilon_0} QQ_1\left(\frac{\vec{r}-\vec{r}_1}{|\vec{r}-\vec{r}_1|^3}\right)$$

$$\vec{E} = \frac{1}{q}\vec{F}$$

$$\vec{F} = \frac{1}{4\pi\epsilon_0} \sum_{i=1}^{n} QQ_i\left(\frac{\vec{r}-\vec{r}_i}{|\vec{r}-\vec{r}_i|^3}\right)$$

$$\vec{E} = \frac{1}{4\pi\epsilon_0} \sum_{i=1}^{n} Q_i\left(\frac{\vec{r}-\vec{r}_i}{|\vec{r}-\vec{r}_i|^3}\right)$$

$$\vec{F} = \frac{1}{4\pi\epsilon_0} \int_Q Qdq\left(\frac{\vec{r}-\vec{r}_i}{|\vec{r}-\vec{r}_i|^3}\right)$$

$$\vec{E} = \frac{1}{4\pi\epsilon_0} \int_Q dq\left(\frac{\vec{r}-\vec{r}_i}{|\vec{r}-\vec{r}_i|^3}\right)$$

$$\lambda = \frac{q}{L} = \frac{dq}{dx}$$

$$\sigma = \frac{q}{A} = \frac{dq}{dx\,dy}$$

$$\rho = \frac{q}{V} = \frac{dq}{dx\,dy\,dz}$$