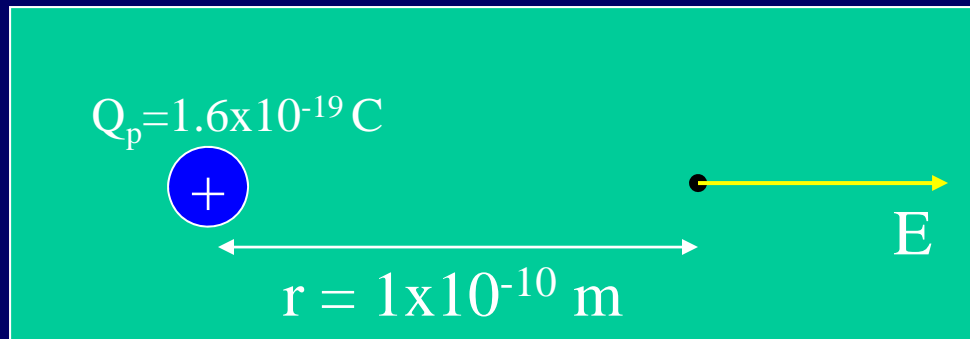


# Electric Field

- Charged particles create electric fields.
  - Direction is the same as for the force that a + charge would feel at that location.
  - Magnitude given by:

$$E \equiv F/q = kq/r^2$$

Example



$$E = (9 \times 10^9)(1.6 \times 10^{-19}) / (10^{-10})^2 \text{ N} = 1.4 \times 10^{11} \text{ N/C} \quad (\text{to the right})$$