

5. Each proton has a charge of $+e = 1.602 \times 10^{-19} \text{ C}$. Thus,

$$E = k \frac{q}{r^2} = (8.99 \times 10^9) \frac{94 \times 1.602 \times 10^{-19}}{(6.64 \times 10^{-15})^2} = 3.07 \times 10^{21} \frac{\text{N}}{\text{C}}.$$

Electric fields are directed radially outward as protons are positively charged.