

Coulomb's Law and PES

Coulomb's Law

- $F = \frac{kq_1q_2}{r^2}$
- What does this mean for charges?
- What does this mean for the distance between the charges?
- What does Coulomb's law have to do with an atom?

$$F = \frac{kq_1q_2}{r^2}$$

- If the charge on the nucleus doubles, what happens to the attractive force between the nucleus and electron?
- If the distance between the nucleus and electron doubles, what happens to the attractive force?
- In an atom with multiple electrons, which require the least amount of energy to remove? Which require the most energy?

Photoelectron spectroscopy (PES)

- Direct evidence that supports validity of orbital diagrams

Photoelectron Spectroscopy



