

PHYS 3446 – Lecture #2

Wednesday, Sep. 1 2010

Dr. Brandt

1. Introduction
2. History of Atomic Models
3. Rutherford Scattering
4. Rutherford Scattering with Coulomb force



Why do Physics?

Exp. {

- To understand nature through experimental observations and measurements (**Research**)

Theory {

- Establish limited number of fundamental laws, usually with mathematical expressions
- Predict nature

⇒ Theory and Experiment work hand-in-hand

⇒ Theory works generally under restricted conditions

⇒ Discrepancies between experimental measurements and theory presents opportunities to improve understanding

⇒ Understanding leads to applications (electricity, computers, etc.)



Structure of Matter

