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## **Rutherford Scattering**

### **Abstract:**

The Rutherford's scattering experiment explains **nuclear model of atom**. It shows that each atom has **nucleus** where most of its mass is focused and electrons revolve around the nucleus in circular orbits.

The simulation is available on **Apps on physics>>Physics of atom>>Rutherford's scattering** with the required parameters.

In the experimental configuration alpha particles are bombarded on thin gold foil and their scattering was influenced by electrostatics force. So the resulting hyperbolic (approximately) trajectories of particles led to conclude that atoms mostly have empty space with small, dense, positively charged nucleus at centre.

### **Keywords:**

Rutherford scattering, gold foil, nucleus, electrostatic force, electrons