

Names: _____

PHYS 7501, FS 2021

Group Activity 13

Due: In class, October 14th

1. At what angle is the Rutherford scattering differential cross section $1/10^{\text{th}}$ of what it is at $\theta_{cm} = 20^\circ$? What about $1/1000^{\text{th}}$?
2. For a fixed beam energy, how do we expect the location of the first elastic scattering minimum change if A of the target is increased? What about if A is fixed for the target, but the beam energy is increased? What about if A is fixed for the target, the lab energy of the beam is fixed, but we use a heavier beam particle?