

AP C Physics Lab #14 — Coulomb's Law

Name _____

Grade _____

In this lab you will use a video to investigate the charge on a small Styrofoam ball. Using the video analysis tools to measure quantities from the video, calculate the charge on the ball given the following:

Assume that the ball is in equilibrium at its maximum displacement.

Assume that the ball and the generator have the same amount of charge.

The mass of the ball is 2.0 g.

The length of the string suspending the ball is 25.4 cm.

The length of the blue tape in the video is 10.0 cm

Show your calculations below. Write your answer here: Charge on the ball _____