In this lab we will be looking at how the magnetic force (F) on an electron traveling at a speed v in a uniform magnetic field B. we will be using F=qvBsinθ where q is the charge and sinθ will tell us the direction of the charge. These charges rotate around a magnetic field and we can use which will tell us how fast the charge is rotating around the magnetic field. We will be using these equations to tell us what the radius is of the magnetic field coming off a set of Helmholtz coils. We will be applying 250 volts to the coils set up, we will then see a spark across the coils we will then adjust the current and measure the r and I through the tube. We will take the measurements down on the chart and plot them on a graph using the equations above.