Worksheet #8: Charge to mass Ratio of Electrion

Dr. Pogo

Due April 2, 2020

Name: _____ Date of Lab: _____

Partner: _____

This worksheet will not be submitted directly. Instead, the Excel notebook that you submit to CANVAS should have a second tab summarizing this worksheet.

Quantity	**Unit**	**Value ± Uncertainty**
Accelerating Voltage		
# of turns of wire in Helmholtz Coil	--	160
Radius of Helmholtz Coil	m	0.140
Diameter of Electron Tube	m	0.160
Slope of 1/r vs. I graph		±
Experimental Charge-to-mass ratio	C/kg	±
Accepted value for Charge-to-mass ratio	C/kg	

Does your measured e/m agree with the accepted e/m? Comment.

What role (if any) would the earth's magnetic field play in this experiment?