

Prelab 7 –Floating Wire

- 1) Read the lab before coming to class.
- 2) Two long straight parallel wires that are carrying identical current. Following your book or lecture notes, **derive** the magnetic force between these wires using the equation for the magnetic force on a wire and the magnetic field from a long straight wire.
- 3) What is the goal of the alignment steps 1-9? What are you looking for in step 10 to “make sure the equipment is aligned properly?”

Postlab 6

- 4) “Magnetic Hysteresis” is a concept which states that magnetic properties of ferromagnets depend on the current external magnetic field AND the *history* of that external field. Do a little research to explain the famous curve below in the context of your experimental work in Lab 6.

