PHYS 1220 Spring 2020

Lab 5 (on-line): Induced Current

Challenge

Determine current induced in a loop.

Available materials:

Use this simulation to carry out your virtual experiment: https://www.thephysicsaviary.com/Physics/Programs/Labs/InducedCurrentLab/

Technical details

Use the built-in timer and ruler to make measurements. You may adjust settings like rail separation, circuit resistance, velocity (level and direction), and magnetic field (magnitude and direction).

Lab report considerations

Multiple trials should be pursued for each setting. Use the dataset to report the uncertainty. Determine induced currents for at least three different settings. In this experiment, do you expect different results obtained from Faraday's Law and from motional emf? Your report should contain essential components of a typical lab report.

A neutron walked into a bar and asked, "How much for a drink?"

The bartender replied, "For you, no charge."

