

Re: Magnetic Propulsion Experimental Ideas

Source: <http://sci.tech-archive.net/Archive/sci.physics/2004-09/8412.html>

From: Larry Adams (larryadams717_at_aol.com)

Date: 09/21/04

Date: 21 Sep 2004 16:04:16 -0700

infallable@gmail.com (Jonathon Sims) wrote:

- > *I am in the midst of a High School science fair project as of right*
- > *now. I am planning on doing a project on magnetic propulsion, or it's*
- > *like. My Physics teacher advised me to find some newsgroups and see if*
- > *I could possibly accumulate ideas that I could use. DO any of you all*
- > *have any ideas that could suitably be done by a high school student?*

There is a dramatic demonstration of Lenz's law made with an electromagnet and an aluminum ring (placed on the upright end of the electromagnet).

When the coil of the iron core electromagnet is connected to alternating current, the ring flies into the air.

The force comes from the induced eddy currents in the ring, generating a downward north pole opposed to the upward north pole of the electromagnet. When the AC cycle reverses, there are two south poles repelling each other.

An aluminum or copper disk will also be repelled.

Rail guns have been proposed to propel small vehicles into space. But they minimize eddy currents for this purpose.

Thompson's coils maximize eddy currents to repel conductive materials in the vicinity of their magnetic fields.

A Thompson's coil is demonstrated levitating a copper ring, along with a type of coil gun that works by repelling the projectile: the Disk Shooter.

<http://www.powerlabs.org/emguns.htm>

(Reply here; no email accepted)

L.A.