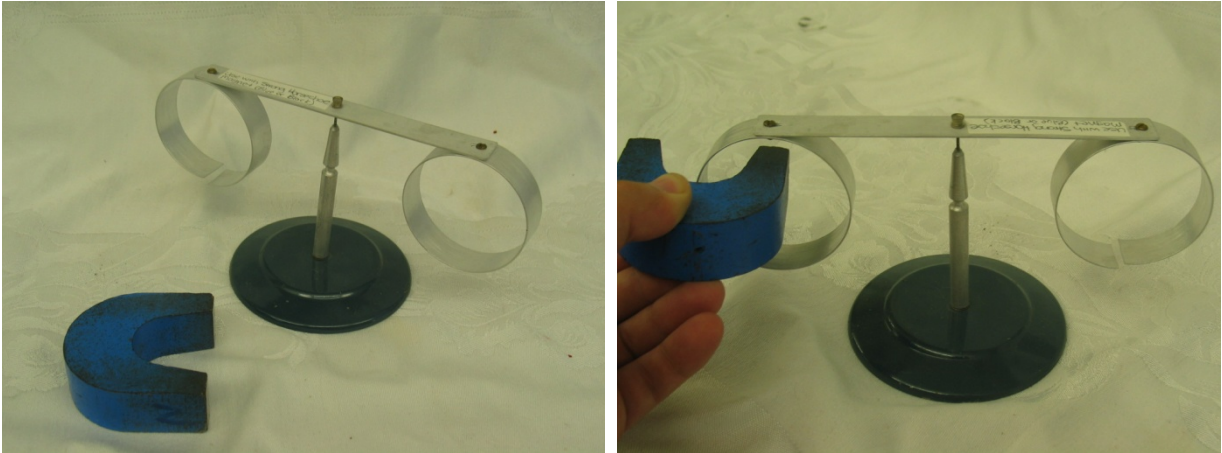


## Lenz's Law Apparatus



**Purpose:** To demonstrate Lenz's Law using aluminum rings and a magnet.

**Location:** Room 146; shelf N1, blue horseshoe magnet on M4

Place the ring apparatus on the table and make sure it is level. Give it a tap to make sure it is moving freely with minimal friction. The rings are aluminum, so show the class when the magnet is brought up to the rings very slowly, there is no magnetic attraction between the materials. Move the horseshoe magnet in and out of the continuous ring without touching it, to show that the motion of the magnet is inducing eddy currents around the ring. The class should be convinced that eddy currents are being induced because they produce a magnetic field that is causing the ring to move with the magnet. When the magnet is pulled away the ring will again move in the same direction as the magnet. Repeat with the ring that has a slit in it to show that the slit prevents strong eddy currents from occurring, so the ring doesn't move.