

## Magnet Drop



### Friction Setup

**Purpose:** Demonstrates magnetic braking by induced eddy currents.

This demo consists of an aluminum tube (about 5 feet long) and two blue cylinders. The cylinders are similar, but one contains a magnet and the other does not. If the 'dummy' is dropped through the tube, it travels quickly as expected. The magnet takes a very long time to drop through – quite surprising. If you tend towards the theatrical, you can palm the magnet off on an assistant from the audience for a funny gag.

**Note:** We have two tubes; One could connect them to make a longer drop. The length becomes an issue though and seems a little impractical to me.

Also, the magnet is fairly strong, so if the tube is against e.g. a steel cart, it will attach itself in mid drop and never come through.

**Extra Equipment:** None

**Location:** Shelf F4