

## Inertia Wands



**Purpose:** To demonstrate that rotational inertia is determined not just by mass, but by how the mass is distributed.

**Location:** room 136, shelf N6

One of the wands has most of its mass near the middle; the other has most of its mass near the ends. Although they both have the same mass and length, one is harder to rotate than the other, which students can readily feel by trying to rotate them back and forth as fast as they can. A good way to start is to have two students come forward and see who can rotate the wand back and forth fastest.