

## CWSF 2013 - Lethbridge, Alberta



### John Laamanen

#### Magnetic Motor Phase 2: Proving Efficiencies

**Challenge:** Energy

**Category:** Junior

**Region:** Sudbury

**City:** Sudbury, ON

**School:** Algonquin Road P.S.

**Abstract:** My project involves using magnetic repulsion to create rotational energy. The apparatus built this year removed variables that were in my previous version. These improvements gave more accurate results and has made me more confident that my hypothesis is correct and rotational energy can be created with magnetic repulsion.

#### Biography

My name is John Laamanen. I am a grade 8 student from Sudbury, Ontario, and active on the student council at Algonquin Road Public School; my favorite subjects are math and science. I enjoy camping, the outdoors as well as studying film production. Recent achievements include winning a Bronze medal at last year's CWSF and most recently speaking in a TEDx event. My interest in using magnets to create energy started in 2010 when I saw a linear magnetic accelerator. I wondered if I could create a non-linear magnetic "motor" using magnetic repulsion in a circular way. So I drew a schematic showing each part of the motor and how magnetic repulsion worked to create energy. Building upon last year's learning I did add a constant power source, which allowed me to measure the effect of magnetic repulsion more accurately and show there is any net benefit in using magnets to create energy. The next step would be to get try this same effect in a large scale generator. My advice to other students would be to choose a subject that is challenging and interesting to them. The outcome may be that you're "attracted" to studying science.

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