

# CWSF 2012 - Charlottetown, Prince Edward Island



## John Laamanen

### Magnetic Motor: Potential Clean Energy

**Challenge:** Innovation

**Category:** Junior

**Region:** Sudbury

**City:** Sudbury, ON

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

**Abstract:** My interest in using magnets to create energy started in 2010 when I saw a linear magnetic acceleration project. After I saw it I wondered if I could create a non-linear magnetic "motor" using magnetic repulsion in a circular way. Shortly later I drew a diagram showing each part and how the magnetic repulsion would work to create energy.

#### Biography

My name is John Laamanen. I am a grade 7 student from Sudbury, Ontario, and the vice president of 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. One achievement I am proud of is winning Canada's History Medal in 2010. 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. One improvement for my magnetic motor would be to learn more about magnetic shielding, which theoretically help my rotation cycle run better as shown in my schematic. A next step for my project would be to see if by adding a power source, there is any net benefit in using magnets with assistance of a motor to create effective repulsion. 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.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 300</b>