

## CWSF 2005 - Vancouver, British Columbia



### Ryan Giuliani

#### The Force of Magnetic Repulsion

**Division:** Physical & Mathematical Sciences

**Category:** Senior

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Esquimalt High School

**Abstract:** I hypothesized that the force between two repelling magnets would mimic electrostatic point charges and that the force of magnetic repulsion would be inversely proportional to the square of the distance separating the magnets. The empirically derived proportionality disproved my hypothesis. The force was inversely proportional to the distance cubed.

| Awards  | Value          |
|---|----------------|
| Petro-Canada Peer Innovation Award - Senior - Western Canada<br>Sponsor: Petro-Canada   | \$200          |
| The University of Western Ontario Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: University of Western Ontario | \$1 000        |
| Bronze Medal - Physical & Mathematical Sciences - Senior<br>Sponsor: Encana Corporation   | \$300          |
| <b>Total</b>  | <b>\$1 500</b> |