

# CWSF 2010 - Peterborough, Ontario



## Sarah Battat

### Polarization: Ray Ray Go Away

**Division:** Physical & Mathematical Sciences

**Category:** Intermediate

**Region:** Montreal

**City:** Westmount, QC

**School:** The Study

**Abstract:** What is the difference in the intensity and polarization of laser light, when a Ferrofluid or Magneto-Rheological Fluid (MRF) is used as a polarizer, in the presence of a magnetic field?

### Biography

Science has captivated the eyes of Sarah Battat every since a young age. Sarah attends The Study, located in Montreal, where she is an enthusiast and supporter of Science Fair. Sarah has now participated in the "Super Expo-sciences Bell" twice and this year, Sarah has been privileged to attend the Canada-Wide Science Fair. At both regional Science Fairs that she attended, Sarah was bestowed prizes from McGill and Concordia University, amongst others, and the Bell First Place Prize, in 2009. Sarah has also participated in a scientific colloquium, where a graduate student from McGill lectured, the All Science Challenge, and Toy Challenge. Sarah is avidly implicated in her school's Robotics programme, where she participated and was crowned a winner at both RoboCup (in Graz, Austria) and First Lego League. She hopes to attend the Massachusetts Institute of Technology, to someday become an engineer or physicist. Aside from Sarah's passion for the sciences, Sarah is a nationally and provincially-ranked debater. She is also a sports amateur, having participated in her school's volleyball and track and field teams. Sarah also enjoys spending her free time with her family, savouring international cuisine, and painting. Sarah mentors and peer tutors at her school.

### Awards

### Value

Award for Excellence in Astronomy - Intermediate Sponsor: Royal Astronomical Society of Canada	\$750
The Actuarial Foundation of Canada Award - Intermediate	\$750
The University of Western Ontario Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: University of Western Ontario	\$4 000
Gold Medal - Physical & Mathematical Sciences - Intermediate Sponsor: Encana Corporation	\$1 500
<b>Total</b>	<b>\$7 000</b>