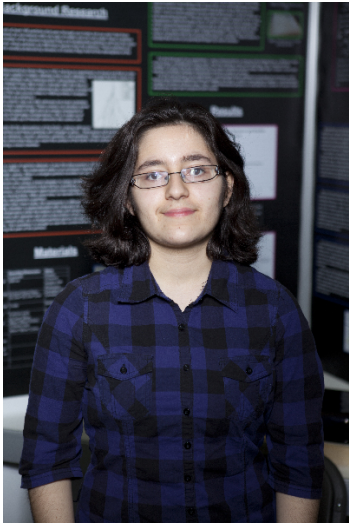


# CWSF 2013 - Lethbridge, Alberta



## Samín Dolatabadi

### From Cosmic Rays: Matter and Anti-Matter

**Challenge:** Discovery

**Category:** Intermediate

**Region:** Southeast Alberta

**City:** Medicine Hat, AB

**School:** Medicine Hat High School

**Abstract:** The purpose of my project was to understand the relationship between an increase in temperature or elevation and the number of muons that originate from cosmic rays. I used a cloud chamber and theoretical physics to come up with the desired answers. My results showed that an increase in temperature did not effect the number of muons, but an increase in elevation did.

#### Biography

My name is Samín Dolatabadi and I am 15 years old. I attend Medicine Hat High School in Alberta. This is my first ever science fair project and I am privileged to come to CWSF. In my regional science fair, I was awarded the best physical science project and the best project in my age category. I enjoy Math, Chemistry, and Physics and would like to become a Particle Physicist when I grow up. The main inspiration for my project was my desire to want to learn more about what particle physicists study. As a result, I researched lots of topics related to this interesting field. One day, I saw a Youtube video on cloud chambers, so I became interested in making a cloud chamber and using it to study radiation. In school, I am a part of international club, Me To WE, and yearbook. I also volunteer at the Medicine Hat Regional Hospital. In my free time, I like to play badminton, ping pong, tennis, and soccer. I also like to swim. In addition, I like to read books with mysterious and classical books being my favorite.

#### Awards

#### Value

Award for Excellence in Astronomy - Intermediate Sponsor: Royal Astronomical Society of Canada	\$750
<b>Total</b>	<b>\$750</b>