



## CWSF 2015 - Fredericton, New Brunswick



## Micah Windsor-Freeman

The 'God' Particle: Dark Matter Brought to Light?

Challenge: Discovery Category: Junior

Region: Northwestern Ontario

City: Shuniah, ON School: Claude E. Garton

Abstract: This project is about dark matter and how it could account for the missing

gravity needed to hold the galaxies in orbit. No one knows exactly what dark matter is. Some of the possible explanations include MOND, axions, WIMPs, MACHOs, neutrinos and Higgs bosons. My research leads me to conclude that the Higgs boson decays into dark matter particles through

supersymmetry.

## Biography

Hello, I'm Micah Windsor-Freeman from Claude Garton School, Thunder Bay. As a career, I want to pursue particle physics or chemistry. At the 2015 regional science fair, I was awarded a Book Award, a Communication Award and a Junior Award of Excellence. After scrapping two ideas for the school science fair, I found a diagram of the Big Bang in a National Geographic magazine. From a pie chart called "What Is Our Universe Made of?" I learned that no one knows what approximately 95% of the universe is made of, and that immediately interested me. I have been interested in particle physics ever since Grade 3 or 4 when I chose to do a project for science class on atoms and gamma rays. All my life I've been called "small" and I wanted to prove that even small things are important! I would like to learn more about how particle physics can be used in nanotechnology and in everyday life, because my main goal is to discover something that will change the world. If anyone is planning to do a science fair project, only do it about something that you're very interested in, because those always make the best projects.





