

CWSF 2018 - Ottawa, Ontario



Jarek Osika

Exploring 1420 MHz

Challenge: Innovation

Category: Junior

Region: Northern Manitoba

City: Flin Flon, MB

School: École McIsaac School

Abstract: My science fair project is a radio telescope I made to detect 1420 MHz. radio waves from outer space. A big problem has been the high cost of radio astronomy equipment with big antennas and expensive hardware. Now with computers and software defined radio there is a new age of amateur radio astronomy growing. My project will aim to demonstrate this low cost radio astronomy.

Biography

Hello! My name is Jarek Osika, I am a grade 8 student at École McIsaac school in Flin Flon Manitoba and I am 14 years old. I like science and anything outdoors. I have a whole YouTube channel focused on science and projects. It is called Itz Jarek! My science fair project is on radio telescope and the frequency 1420 MHz. My radio telescope is made for sensing radio waves from outer space and graphing them on a computer using an SDR dongle and other components. I have been very interested and astounded by astronomy ever since I was little so I thought this project would be the right choice for me as I have been taking it farther each year. I have also never seen anyone with a project on radio telescopes before so it is unique. I am planning on improving my antennas with more sensitive equipment, bigger power supply and a bigger receiving dish and bigger horn antenna. If you are entering the science fair I encourage you to research and make a project on a topic you are interested in. I am very excited for the CWSF and I cant wait to come again.

Awards

Value

Excellence in Astronomy Award - Junior Sponsor: Royal Astronomical Society of Canada	\$500
Total	\$500