



CWSF 2010 - Peterborough, Ontario



Darrick Lee, Owen Lu

Power Generated from a Wind Turbine

Division: Physical & Mathematical Sciences

Category: Senior

Region: Greater Vancouver
City: Richmond, BC
School: Richmond Secondary

Abstract: The power generation of a wind turbine is given as a simple cubic function

however, physics equations generally tend to oversimplify phenomenon. We tested how power generation was affected factors such as blade size, gear ratio, and wind velocity. Through data analysis we were saw

consistent trends in numerous graphs, and tried to explain the deviation

from the original equation by creating our own.

Biographies

Darrick - My name is Darrick Lee, and I'm currently in Grade 11 at Richmond High Secondary in BC. I've had an interest in the environment for a few years now, and have created a rap music video encouraging sustainability with a friend that has won a local video contest. I have attended the UNEP International Youth Conference on the Environment in South Korea in the summer of 2009. I have done presentations at local elementary schools and leadership conferences about sustainability. I really enjoy science, and hope that I can someday combine these two things I enjoy (the environment and sciences) into a career. I'm hoping to study mechanical and electri... Owen - As a child I always enjoyed playing a variety of sports which carries through from my childhood to today. I also like music and play the piano at a grade 9 level. The sciences and mathematics are my favourite subjects and I value exercising physically equally with exercising mentally. In the past I have placed and in numerous piano competitions and also represented my city in a basketball team.

Awards	Value
CAP Physics Prize - Senior	\$1 000
Sponsor: Canadian Association of Physicists	
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Bronze Medal - Physical & Mathematical Sciences - Senior	\$300
Sponsor: Encana Corporation	
Total	\$3 300





