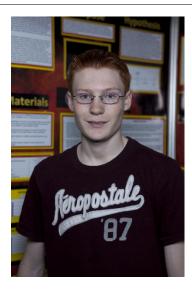




CWSF 2013 - Lethbridge, Alberta



Simulating The Formation and Evolution of Galactic Star Cluster Hyades

Challenge: Discovery Category: Senior

Region: City: School:

Abstract: Using Scientific Programming in Python, three-dimensional simulations

showing the formation and evolution of Galactic/Open Star Cluster Hyades were obtained. This simulation used the N-Body Algorithm to explain the gravitational interactions of stars. Via star catalogues containing Cartesian coordinates, a three-dimensional model of present Hyades was computed. This meant the simulation's initial conditions could be changed until the

quantity of stars inside spherical regions resembled Hyades.

Awards	Value
International Summer School for Young Physicists Award	\$2 500
Sponsor: Perimeter Institute for Theoretical Physics	
Excellence Award - Senior - Bronze Medal	\$100
Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$4 600



