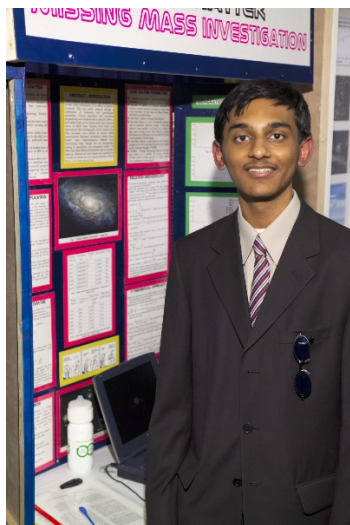


CWSF 2005 - Vancouver, British Columbia



Karthik Ramanathan

Dark Matter: Missing Mass Investigation

Division: Physical & Mathematical Sciences

Category: Senior

Region: Toronto

City: Toronto, ON

School: Marc Garneau Collegiate Institute

Abstract: The existence of dark matter is suggested in galactic structures through the use of a unique algorithm. Luminosity, density, and mass relations were investigated to determine the ideal distributions of dark matter in spiral galaxies, pursuant to observed rotational velocity curves. Further, hybrids of conventional and classical theories were implemented.

Awards	Value
The Canadian Society for the Weizmann Institute of Science Scholarships Arthur and Beatrice Minden Scholarship Sponsor: The Canadian Society for the Weizmann Institute of Science (Weizmann Canada)	\$8 000
Petro-Canada Peer Innovation Award - Senior - Ontario South Sponsor: Petro-Canada	\$200
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Physical & Mathematical Sciences - Senior Sponsor: Encana Corporation	\$300
Total	\$9 500