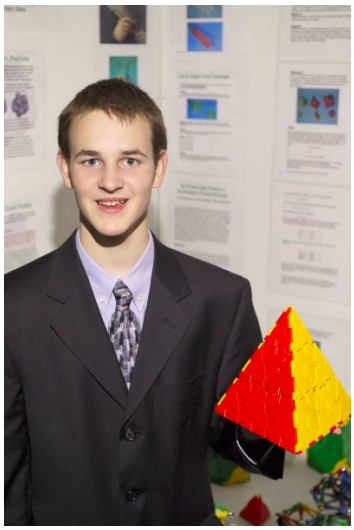
CWSF 2005 - Vancouver, British Columbia



Daniel Bezdek

Kepler's Quest

Division: Physical & Mathematical Sciences
Category: Intermediate
Region: Calgary Youth
City: Calgary, AB
School: St. Brigid School
Abstract: I solve the Discrete Kepler Problem for unit sphere packings when the spheres lie in convex position. Subsequently, I introduce a new class of convex polyhedra and propose a way of classifying them. Finally, I propose a new model for protein folding.

Awards	Value
Discovery Channel Math Award Sponsor: Discovery Channel	$750
Canadian Mathematical Society Award - Intermediate Sponsor: Canadian Mathematical Society	$500
Genome Canada Awards - Intermediate - First place Sponsor: Genome Canada	$2 000
The University of Western Ontario Scholarship Silver Medallist - $1500 Entrance Scholarship Sponsor: University of Western Ontario	$1 500
Silver Medal - Physical & Mathematical Sciences - Intermediate Sponsor: Encana Corporation	$700
Total	$5 450

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