

2009 Intel ISEF Grand Awards

MIT Lincoln Laboratory

The Massachusetts Institute of Technology's Lincoln Laboratory has partnered with Society for Science to promote science education through a program called the Ceres Connection. This program seeks to name minor planets after students through Society for Science competitions, including the Intel ISEF. Notification will be sent to the finalists when the name has been accepted and confirmed. All minor planets named in the Ceres Connection program have been discovered by the Lincoln Near Earth Asteroid Research (LINEAR) program, operated by Lincoln Laboratory.

First and second place category award winner names will be sent to the International Astronomical Union (IAU) for naming rights of a near earth asteroid.

European Organization for Nuclear Research-CERN

Intel ISEF finalists winning a "Best of Category" are provided an opportunity to travel to tour CERN, the European Organization for Nuclear Research, the world's leading laboratory for particle physics in Geneva, Switzerland. As many as 12 students will be selected to travel from June 28th-July 2nd, 2009.

Intel will present Best of Category Winners with a \$5,000 award and a new laptop powered by an Intel® Core™2 Duo processor. Additionally, a \$1,000 grant will be given to their school and the Intel ISEF Affiliated Fair they represent.

Team Projects - Presented by Science News

Intel will present Best of Category Winners with a \$5,000 award and a new laptop powered by an Intel® Core™2 Duo processor. Additionally, a \$1,000 grant will be given to their school and the Intel ISEF Affiliated Fair they represent.

Intel ISEF Best of Category Award of \$5,000 for Top First Place Winners

PH313 *A Novel Approach to Asteroid Identification Using Image Processing of Existing Data*
Erika Alden DeBenedictis, 17, Albuquerque Academy, Albuquerque, New Mexico
Haochen Hong, 16, La Cueva High School, Albuquerque, New Mexico
Duanni Huang, 18, La Cueva High School, Albuquerque, New Mexico

First Award of \$3,000

PH313 *A Novel Approach to Asteroid Identification Using Image Processing of Existing Data*
Erika Alden DeBenedictis, 17, Albuquerque Academy, Albuquerque, New Mexico
Haochen Hong, 16, La Cueva High School, Albuquerque, New Mexico
Duanni Huang, 18, La Cueva High School, Albuquerque, New Mexico

Electrical and Mechanical Engineering - Presented by Intel

Intel ISEF Best of Category Award of \$5,000 for Top First Place Winner

EE068 *The Underground Radio II*

Alexander Kent Kendrick, 16, Los Alamos High School, Los Alamos, New Mexico

First Award of \$3,000

EE068 *The Underground Radio II*
Alexander Kent Kendrick, 16, Los Alamos High School, Los Alamos, New Mexico

Biochemistry - Presented by Agilent Technologies

Fourth Award of \$500

BI016 *Is Autism Both a Genetic and Environmental Disorder?*
Alexander Scott Caldwell, 16, Saint Pius X High School, Albuquerque, New Mexico

Electrical and Mechanical Engineering - Presented by Intel

Fourth Award of \$500

EE073 *ULF Communications: Reaching the Surface*
Sophie Marie Swingle, 17, McCurdy High School, Espanola, New Mexico

Engineering: Materials and Bioengineering - Presented by Intel

Fourth Award of \$500

EN026 *Design and Use of an Impact Response Device to Assess Structural Integrity*
Devin John Roach, 15, Saint Pius X High School, Albuquerque, New Mexico

Mathematical Sciences - Presented by Intel

Second Award of \$1,500

MA025 *On G-Difference: A Property of Permutations and Words*
Kristin Rose Cordwell, 18, Manzano High School, Albuquerque, New Mexico

Physics and Astronomy - Presented by Intel

Second Award of \$1,500

PH019 *Determining the Orbital Elements of Minor Planet 23265*
Caroline Julia von Wurden, 17, Los Alamos High School, Los Alamos, New Mexico

2009 Intel ISEF Special Awards

Air Force Research Laboratory on behalf of the United States Air Force

Established in 1947, the United States Air Force is one of the seven Uniformed Services of the United States. The mission of the Air Force is to deliver sovereign options for the defense of the United States of America and its global interest -- to fly and fight in Air, Space and Cyberspace. The USAF is the largest and most technologically advanced force in the world. Characterized by science and technology, the Air Force is totally committed to rewarding science projects that exhibit these high standards.

Second Award of \$1,500

EN026 *Design and Use of an Impact Response Device to Assess Structural Integrity*
Devin John Roach, 15, Saint Pius X High School, Albuquerque, New Mexico

Astronomical Society of the Pacific and the American Astronomical Society

The Priscilla and Bart Bok First and Second Awards are given jointly by the Astronomical Society of the Pacific and the American Astronomical Society. The main criterion for selecting the two Bok Awards is scientific merit. Observational, instrumental, or theoretical projects are all eligible, as are interdisciplinary projects involving physics, mathematics, computer science, and engineering, etc.

Priscilla and Bart Bok Second Award of a \$500 scholarship

PH019 *Determining the Orbital Elements of Minor Planet 23265*
Caroline Julia von Wurden, 17, Los Alamos High School, Los Alamos, New Mexico

Florida Institute of Technology

Florida Institute of Technology is the only private technological University in the southeastern United States. Florida Tech, located on the Space Coast near Kennedy Space Center, offers full undergraduate and graduate programs in engineering, science, psychology, business, and aeronautics.

\$50,000 Scholarship Award of \$12,500 per year per student, renewable annually for 4 years

PH313 *A Novel Approach to Asteroid Identification Using Image Processing of Existing Data*
Erika Alden DeBenedictis, 17, Albuquerque Academy, Albuquerque, New Mexico
Chris Hong, 16, La Cueva High School, Albuquerque, New Mexico
Tony Huang, 17, La Cueva High School, Albuquerque, New Mexico

International Council on Systems Engineering - INCOSE

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded to develop and disseminate the interdisciplinary principles and practices that enable the realization of successful systems. INCOSE will award the best interdisciplinary project that can produce technologically appropriate solutions the meet societal needs.

First Award of \$1,500

EE068 *The Underground Radio II*
Alexander Kent Kendrick, 16, Los Alamos High School, Los Alamos, New Mexico

Honorable Mention

ET061 *Utilizing the Other 99% of America's Wind Energy*
James Lee Clark, 16, Mayfield High School, Las Cruces, New Mexico

Patent and Trademark Office Society

Promotes the US Patent and Trademark system's growth and well-being, promotes and fosters a true appreciation of these systems, recalls our rich heritage of innovation and commerce, and cultivates the highest standards of professional ethics among patent practitioners. The PTO extends this mission to the scientists and engineers of tomorrow. The Special Awards given at the Intel ISEF encourage young inventors to develop new and useful products, and to pursue careers in science and technology.

Grand Award of \$1,000 and a framed copy of the first patent granted in the United States of America

EE068 *The Underground Radio II*
Alexander Kent Kendrick, 16, Los Alamos High School, Los Alamos, New Mexico

Sierra Nevada College

SNC combines the liberal arts and professional preparedness through an interdisciplinary curriculum which emphasizes entrepreneurial thinking and environmental, social, economic and educational sustainability. These graduates will be scholars and contributors to a sustainable world.

SNC is offering the "Science Scholarship" of \$12,500 per year for 4 years to ALL Intel ISEF finalists!

Genius Scholarships - SNC is offering Full tuition "Genius Scholarships" to selected finalists in the environmental science and computer science fields. These select scholarships are valued at \$23,000 per year for 4 years for a total of \$92,000.

ET061 *Utilizing the Other 99% of America's Wind Energy*
James Lee Clark, 16, Mayfield High School, Las Cruces, New Mexico

Society of Exploration Geophysicists

For projects that display excellence related to the geophysical sciences.

Distinguished Achievement Award of \$1,250 and a trip to the SEG International Exposition and Annual Meeting

EE068 *The Underground Radio II*
Alexander Kent Kendrick, 16, Los Alamos High School, Los Alamos, New Mexico