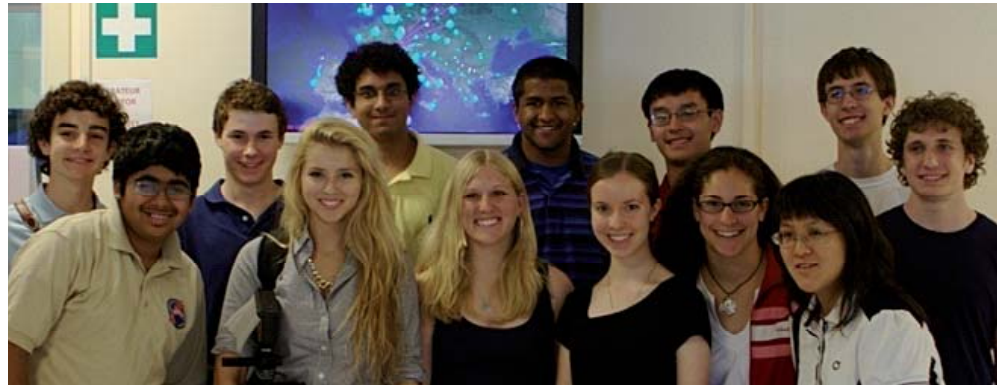


06/07/2009

13 Intel ISEF Best of Category pre-college winners come to visit CERN, the coolest place on Earth



CERN hosted the visit of thirteen pre-college students who won 'Best of Category' awards at the Intel International Science and Engineering Fair (ISEF) this spring in Reno, USA.

The young students spent four days at CERN and visited the Large Hadron Collider (LHC) facility, the world's largest particle accelerator and most complex machine ever built. They enjoyed presentations from various prominent scientists whose research is predicted to unearth evidence of new fundamental particles that will provide better insight in the fundamental laws of nature and the origins of our Universe. The students were particularly impressed to go 100 m underground to visit the LHC tunnel, a 27 km ring of superconducting magnets that will be chilled later this year to a temperature of just 1.9 degrees above absolute zero (-271.3°C), colder than outer space and actually the coolest place in the Universe.

The Intel International Science and Engineering Fair (Intel ISEF), the world's largest international pre-college science competition, annually provides a forum for more than 1,500 high school students from over 50 countries to showcase their independent research. The Intel ISEF organizer, 'Society for Science & the Public', partners with Intel -along with dozens of other corporate, academic, government and science-focused sponsors. The partners provide support and awards each year. The Intel ISEF encourages students to tackle challenging scientific questions, using authentic research practices to create solutions to the problems of tomorrow. In fact, despite their young age, the 13 students were already well-acquainted with science.

Ronit Abramson won the Best of 'Cellular and Molecular Biology' Category award for her project focusing on the implications for novel transformation and nanotechnology techniques on cell wall formation from marine diatom protoplasts. In Physical Sciences, Erika DeBenedictis and Duanni Huang won for their novel approach to identifying asteroids using image processing of existing data. Marley Iredale won in Earth and Planetary Science for her project on evaluating tsunami risks in Discovery Bay, Washington. In Environmental Management, Eliza McNitt won for her analysis of the Imidacloprid's role in Colony Collapse Disorder. I-Ching Tseng won in Microbiology for her research on a Styrofoam-decomposing bacterium from mealworms. In Energy and Transportation, Ryan Alexander won for his analysis of the effectiveness of an oscillating wind energy generator. Mark Chonofsky won in Plant Sciences for his research on the genes of Taxacea, from which the cancer drug Taxol is derived. In Computer Science, Kevin Ellis won for his development of System S, an extension to the lambda calculus for describing state in functional languages. Alexander Kendrick won in Electrical and Mechanical Engineering for his development of an underground radio that can be used for cave and mine rescues, radiolocation, underground imaging, detection of coal and petroleum, and for monitoring an underground climate. In Medicine and Health, Ashoka Rajendra won for his research on down-regulation of hTERT sensitizes chemotherapeutic effects of Docetaxel in human prostate cancer cells. Scott Skirlo won in Materials and Bioengineering for his project on the degradation of the Two-way effect in Nickel Titanium, a shape memory alloy, over several thousand thermal cycles under extreme hot and cold conditions. In Physics and Astronomy, Nilesch Tripuraneni won for his research on a relativistic generalisation of the Navier-Stokes equations to quark-gluon plasmas. Thomas H. Osburg, Director Europe – Corporate Affairs for Intel Corp., came to CERN to meet the students, and to discuss education activities with Rolf Landua, Head of CERN Education Department, and CERN openlab Management.

Prior to their visit, the students already had a first contact with CERN in the person of Jim Virdee, particle physicist and professor of physics at Imperial College, London, and scientific associate at the Physics Department, CERN, who attended the Intel ISEF this year and gave the keynote speech at its Grand Opening Ceremony. Wolfgang von Rden, Head of CERN openlab, accompanied the students during their stay at CERN. Since the start of CERN openlab in January 2003, Intel and CERN have not only been collaborating on scientific projects but also on educational activities. Every year, young IT students participate in the CERN openlab Summer Student Programme to work on the joint projects and attend lectures given by CERN experts and CERN openlab partners. Workshops on advanced topics are also jointly organised in order to disseminate the knowledge created through these projects.

Mlissa Le Jeune, CERN openlab