



PHYSICS STUDENTS VISIT CERN IN GENEVA

In June of last year, A Level Physics students at Havering Sixth Form College were inspired by theoretical physicist, Dr David Berman, from Queen Mary University who told them about his work with physicists at the CERN particle physics research centre. The students learned about the many areas of particle physics and the formation of the early universe following the Big Bang.

Following the lecture, it was decided to visit CERN (the European Organisation for Nuclear Research) which has the largest particle accelerator in the world and employs thousands of engineers and physicists from throughout Europe.

Eighteen students and three staff flew to Geneva on 9th February and stayed over night in Geneva Youth Hostel before travelling a few kilometres to visit one of the experiments at CERN the following day. They were given an introductory lecture on the work of scientists at CERN. This was followed by guided tours of an accelerator that feeds fast particles into the Large Hadron Collider and a particle detector which processes the results of the particle collisions. Most importantly, they managed to fit in a visit to the souvenir shop! In the afternoon they visited CERN's Interactive Visitor Centre before flying back in the evening.

At CERN, particles are accelerated over large distances at speeds close to the speed of light. The newest experiment called the Large Hadron Collider is so large it forms a giant circle 27 km in circumference straddling the border between France and Switzerland.

Team Leader, Ian Roche, said: "To learn at first hand about the extraordinary ideas and fantastic engineering challenges that scientists at CERN are working on every day was inspirational for the students and the teachers."

Student Perez Kabagambe (17) has offers to study aeronautical engineering at Cambridge University and at Imperial College. He said: "My interest in particle physics has grown through studying A Level Physics. It was an opportunity to witness scientists working to find the answers to the big questions asked by particle physicists and just how far our curiosity has driven us to find out what's out there. I learnt why the Large Hadron Collider is used and why scientists are looking for a particle called the Higgs-Boson to help explain what gravity really is."

Emmanuel Abaya (18) said: "The trip was a great way to bring students together, teachers also. I was fascinated to see how physicists are able to test their imaginative theories through ingenious experiments."

Physics teacher Nicola Diplock summed up the experience: "The enthusiastic comments of the students after the visit are very rewarding for the teachers and show how valuable an experience it was for every one involved."