

## Welsh teachers return from CERN to teach what matters

Last month 24 physics teachers from all over Wales visited the site of the large hadron collider in Geneva to learn more about the latest discoveries in particle physics, as part of their Continuing Professional Development (CPD).

The CERN teacher placement scheme, organised by Welsh Government, supported by the National STEM Learning Centre in York and funded by Project ENTHUSE and Dr Lyn Evans, provides teachers the opportunity to attend lectures and learn about CERN's facilities, functions and operation from the scientists and engineers who work there. Dr Evans from Aberdare, is the former Director of the Large Hadron Collider project, and acts as course co-ordinator for the four-day visit.

Dr Evans said,

“Our teachers are our greatest asset and deserve all the support we can give them. At CERN they experience a vibrant atmosphere and interact with front-line scientists. I hope that they can take their enthusiasm back to the classroom and inspire more budding young scientists, engineers and technicians, which are needed for Wales to compete in the 21st century high-tech world.”

Cabinet Secretary for Education Kirsty Williams said,

“Opportunities like this are vital if our teaching workforce is to better understand and communicate the application of real world science and technology. I want to ensure that our teaching workforce is equipped with the knowledge and skills necessary to guide our young people's learning in STEM subjects.

“Last month I announced the creation of a National Network for Excellence in Science and Technology (NNEST). The Science Network will be critical to supporting teachers of science and technology for those aged 3 to 18 through ready access to global developments in teaching and learning. I expect the network to consider closely the type of professional development offered by CERN, how that can be best communicated to teachers and expand such opportunities in the fields of chemistry, biology and engineering in the future.”

Chris Allton, professor of Theoretical Physics at Swansea University, said,

“To witness cutting-edge science first hand and to be able to bring this experience to life back in the classroom will prove

inspirational for our pupils. We are proud that we can showcase antimatter research done by Swansea physicists to the visiting teachers while they are in CERN. The feedback we have received from the group is that the knowledge and experience gained from this trip should make teaching of physics much more enjoyable and meaningful for the students.”

Simon Ealey-Fitzgerald, Curriculum Area Leader for Science at Llanidloes High, who attended this year said,

“The event was inspiring and enthusing (at times confusing!), and the wealth of subject knowledge of the CERN participants, along with the pedagogical knowledge and insight of our teachers is to be celebrated. This really was a chance for Welsh teachers to share ideas and strategies for the ultimate benefit of our pupils.”

The programme has been organised and designed by our own STEM team and CERN Teacher Programme co-ordinator Jeff Weiner to ensure the teachers have the opportunity to appreciate CERN and the work undertaken there; by attending lectures on Particle Physics, the development of particle accelerators, particle detectors, visiting the Large Hadron Collider, the Magnet test facility, the Compact Muon Solenoid detector and finally a visit to the Antimatter Factory.

Later this year, and for the first time, teachers will be able to attend a two week summer placement at CERN; the first time a residential stay has been offered to all school science teachers (not just physics).

Teachers who wish to apply should contact the team at [Dysg@wales.gsi.gov.uk](mailto:Dysg@wales.gsi.gov.uk)