

# LARGE HADRON COLLIDER COMES TO PARLIAMENT

*Professor John Womersley is the Chief Executive Officer of the Science and Technology Facilities Council, one of the seven UK Research Councils. UK Particle Physics and our participation in CERN is funded by STFC.*



Professor John Womersley and Ed Vaizey MP

Like me, I am sure that many of you found the news of the discovery of a Higgs-like particle on 4th July 2012 interesting – and exciting. Particle physicists have been working towards this discovery for no less than forty-eight years and it was great to celebrate our success in Parliament as the Large Hadron Collider (LHC) prepares for the next phase upgrade.

Working alongside the Institute of Physics and the Particle Physics community, the Science and Technology Facilities Council has been touring the country holding exhibitions celebrating the UK's involvement in the LHC. In the first week of September, we took our exhibit

to the Houses of Parliament and held a reception to celebrate the achievements of their constituents with MPs and Peers. We will be heading to the devolved assemblies in Scotland, Wales and Northern Ireland in the coming months to do the same.

It was great to welcome many of the Parliamentarians who have actively supported the project over the years, such as Andrew Miller MP, Chi Onwurah MP, Stephen Metcalfe MP, Graham Evans MP (whose constituency includes STFC's Daresbury Laboratory), as well as our parliamentary host, Ed Vaizey MP (whose constituency includes STFC's Rutherford

Appleton Laboratory). What was clear and gratifying to see from the MPs in attendance was the wider impact that the LHC was having on MPs and Peers, many of whom were being drawn to science for the first time because of it. Perhaps most pleasing to see was the presence of Parliamentarians representing constituencies away from the big university towns and cities who were enthused about science they were discussing and celebrating. In talking to Sir Peter Bottomley MP (Worthing West), Andrew George MP (St Ives), Jim Dowd

While the LHC still has much to deliver, we can already point to real impacts from CERN such as the creation of MRI scanners and the world wide web, together with the inspiration for thousands of students to study STEM subjects.

We were joined at the event by representatives of our physics community, including Institute of Physics President Sir Peter Knight and Professor John Ellis who both spoke at the event. Commenting on the resurgence of science and physics in our schools, Sir Peter reported that



Professor John Ellis



Sir Peter Knight

MP (Lewisham West and Penge) and David Amess MP (Southend West) it was clear that the opportunity to understand blue skies science not only as a thing of intrinsic and academic value, but also as a pursuit with the capacity to produce real-life outputs and returns to the UK is something appreciated and understood.

the number of students choosing A-Level Physics has increased by 10,000 in the past year, partly because of the exciting nature of projects such as the LHC. While we still have work to do in encouraging more young females to enter the discipline, this rise is nonetheless highly encouraging. Professor John Ellis spoke

... the resurgence of science and physics in our schools ...

passionately about securing the legacy of the Higgs boson discovery and of the UK effort that has gone into making the LHC a success – pointing out the role of British Director-General of CERN, Sir Chris Llewellyn Smith, in persuading the Member States to approve construction of the LHC project in 1994; Lyn Evans, who led the LHC construction project; and Steve Myers who now heads



Dr Lyn Evans and Ann Clwyd MP



Sir Peter Bottomley MP and Tim Bestwick



John Womersley and Gavin Barwell MP



Stephen Metcalfe MP and Royal Holloway PhD student, Tim Brooks

With the LHC now entering the final stages of its 2012 operations before it undergoes upgrade and maintenance throughout 2013, I am delighted that the project has not only delivered science results which have captivated physicists across the globe, but inspired school children to take up physics and Parliamentarians to support our cause. The connection between discovery and inspiration is set to continue.

the team operating the LHC so successfully. Needless to say, the man whose name has been synonymous with the project, Professor Peter Higgs is claimed by both the people of Newcastle (where he was born and raised) and Edinburgh (where so much of his work has taken place) as one of their own. All of this demonstrates the UK's leading role throughout the life of this project.



Andrew Miller MP



Professor John Butterworth and Julie Hilling MP



Dr Beth Taylor and Andrew Miller MP



Professor Phil Allport, Andrew Miller MP and Professor John Butterworth

At the event, I invited those Parliamentarians present to register their interest in visiting CERN during its downtime in 2013 to see first-hand the awe inspiring science of the LHC. To register your own interest, please contact STFC Public Affairs on 01235 778082

FRONT COVER: Image of the result of a proton-proton collision event detected by the ATLAS experiment at the Large Hadron Collider. This is superimposed on a photograph inside the 27km circumference LHC tunnel located 100m beneath Switzerland and France, where beams of particles are accelerated to velocities close to the speed of light, at temperatures near to absolute zero, before being collided into one another.

