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The search is on – UK candidate confirmed

The search for the next Director General (DG) of CERN has begun. The current post holder, Professor Rolf Heuer is due to step down in December 2015 and the process for appointing his successor got underway a few months ago.

Applications for the fixed term post closed at the end of May and a long list of candidates was approved at the June meeting of CERN Council.

Candidates for the post can come from any country, and the UK conducted its own selection process to identify a preferred candidate. The Institute of Physics and Royal Society consulted members of the UK physics community, and the names that were proposed were discussed at the UK Committee on CERN. UKCC put forward its choice to David Willetts MP, Minister of State for Universities and Science, and he has endorsed Professor John Womersley (Chief Executive Officer of STFC) as the UK’s preferred candidate.

When the process of selecting a new DG first started, CERN Council appointed a Search Committee to manage the process. Over the summer, that committee will interview the candidates on the long list and then submit a short list of three names to the September meeting of CERN Council.

The members of CERN Council will then interview the candidates and elect the new DG through a secret ballot.

Identifying and meeting industrial needs

UK businesses have won over £55M worth of contracts from CERN over the last three years. There is scope to make this financial return significantly greater. The next CERN ‘Meet the Buyer’ event is scheduled for 24 October in London. This is the latest in a series of events to position UK companies to win contracts to supply products and services to CERN.
Increasing the UK industrial return at CERN is a team effort; STFC’s industrial liaison team (Julie Bellingham, Alan Silverman and Allanah Bayliss) talk to engineers, scientists and procurement staff at CERN and in the UK academic community to identify upcoming tenders that could be met by UK suppliers. They then actively seek relevant companies and support them through the tendering process. They also work closely with Eleanor Baha from UKTI to support companies on visits to CERN through the UK@CERN programme.

So how can you help to increase the UK’s industrial return from CERN?

If you’re working on a CERN experiment (either as CERN staff or a UK academic), have you got upcoming requirements? Would you like to meet UK suppliers who have experience of supplying CERN or other groups? If the answer is ‘yes’ to either of these questions, you should contact the team to discuss your requirements and register to attend this free event.

If you’re a company that would like to supply CERN – either for the first time, or you would like to build on an existing relationship, make sure that you’re one of the first to hear about opportunities at CERN. Once STFC has established what products and services will be required, companies in the relevant sectors will be invited to the Meet the Buyer event. Details on how to register for the event will be available in 3-4 weeks and a link will be included in UK News from CERN.

More information on tendering to CERN is available on the STFC website.

Beyond the Higgs boson to treat cancer

UK universities involved in LHC experiments are showcasing two stands at the Royal Society Summer Exhibition in London 30 June – 6 July.

There is stiff competition from universities, research institutes and industry to have stands at the prestigious exhibition that showcases the very latest scientific and engineering developments. The stands have to be engaging to schools, the general public and members of the Royal Society.

The universities of Birmingham, Liverpool, Surrey and Warwick are collaborating with a number of NHS trusts, industrial partners and the Wellcome Trust to present ‘Treating Cancer’.

The World Health Organisation estimate that there are 14 million new cancer cases each year. Half of all cancer patients will receive radiotherapy as part of their treatment but high-energy radiation damages a cell’s DNA. Nearly all current radiotherapy use external beams of X-rays. Protons offer a new form of radiotherapy and PRaVDA (Proton Radiotherapy Verification and Dosimetry Applications) is one of the most complicated imaging instruments ever made; it will let clinicians see in 3D how the protons interact with a tumour. The instrument uses technology developed for the LHC experiments to track the paths of individual protons. Visitors to the Royal Society will be able to take a closer look at ‘the Holy Grail of radiotherapy’.

‘Higgs boson and beyond’ is a collaborative effort from 18 institutes, coordinated by Cristina Lazzeroni (Birmingham and NA62), Wahid Bhimji (Edinburgh and ATLAS) and Kostas Nikolopoulos (Birmingham and ATLAS). During the exhibition, the stand will be manned by representatives from all the UK universities and laboratories represented on the ATLAS and CMS experiments, with participants ranging from current students to senior researchers.

“Our story starts with the Nobel prize being awarded to Peter Higgs and Francois Englert, and asks ‘what’s next?’”

Among many hands-on activities, visitors to the stand will be able to have a go at steering the beam in an accelerator, balance the Universe (to understand supersymmetry) and play pinball to understand the spin of the Higgs boson.
Each demo has been designed by a different university but all are guaranteed to get you thinking.

**Smashing physics**

The latest popular science book to hit the shelves has a more personal perspective than most; Smashing Physics is Jon Butterworth’s (UCL and ATLAS) insider account of the hunt for the Higgs.

Jon brings you the full story of the Higgs boson, from theory to Nobel Prize with all the highs, lows and physics explanations that you need to feel part of the discovery.

As Brian Cox (Manchester) said in his review, “If you want to know what being a professional scientist is really like, read it!”

Smashing Physics is available from all good book shops, but if you’d like a signed copy, Jon will be appearing at a variety of events around the UK. There are more details on his blog.

**Heard the one about the CERN physicist?**

*By Alex Brown*

Friday the Thirteenth (an auspicious day for some) saw the CERN’s Globe of Science and Innovation filled to capacity as amateur science comedy returned for a second year.

Organised in their spare time by a miscellaneous group of CERN fellows, students, and associated colleagues, ‘Comedy Collider presents: no cause for conCERN’ featured three amateur performers from CERN, supported by professional science comedians from the UK and Spain.

One of the amateurs was Nazim Hussain (Oxford and LHCb). After the show, he said: “This was my first attempt at stand-up. I would definitely do something like this again and I would recommend it to any others at CERN who have ever thought about being (purposefully) funny in public. I had a fantastic time; this might have been the most fun I’ve had with science since the start of my PhD.”

Pushing the boundaries of comedy, Nazim makes his stand-up debut © Piotr Traczyk/CERN

The Comedy Collider team is now looking for CERN users and staff interested in performing a short comedy set at CERN during an event on 20 September as part of the 60th anniversary celebrations. If you’re interested, get in touch!

Comedy Collider was generously supported by CERN and the British Council Switzerland, and benefited from a partnership with the Collider exhibition at the Museum of Science and Industry in Manchester.

The event was recorded and will be available shortly.

**Diary dates**

- **Royal Society Summer Exhibition** – 30 June - 6 July
- **CERN Council** – 15-19 September
- **Collider in Manchester** – until 28 September
- **A world a particle** in Liverpool - until 8 January