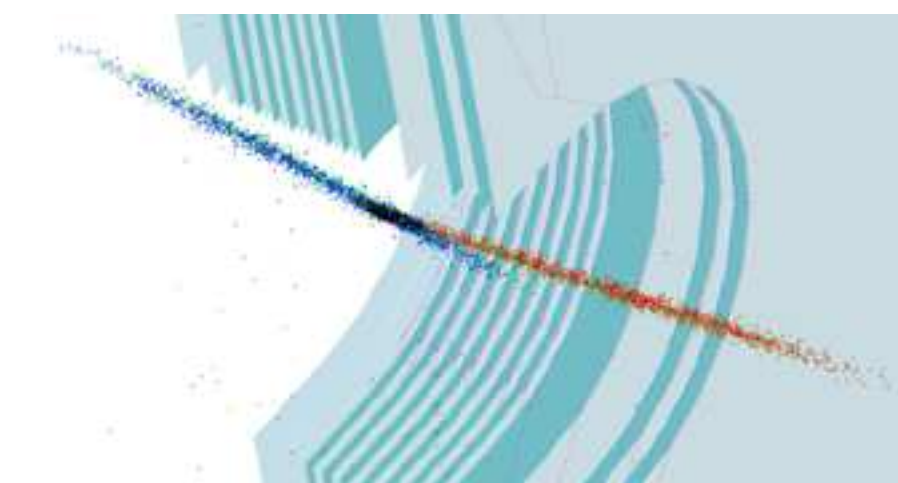


## OF VACUUM AND GAS

A new LHCb programme is delving into uncharted waters for the LHC: exploring how protons interact with noble gases inside the machine pipe. While, at first glance, it may sound risky for the overall quality of the vacuum in the machine, the procedure is safe and potentially very rich in rewards. The results could uncover the high-energy helium-proton cross-section (with all the implications thereof), explore new boundaries of the quark-gluon plasma and much more.



As the beam passes through LHCb, interactions with neon gas allow the experiment to measure the full beam profile. In this diagram, beam 1 (blue) and beam 2 (red) are measured by the surrounding VELO detector.

It all begins with luminosity. In 2011, LHCb set out to further improve its notoriously precise measurements of the beam profile, using the so-called Beam-Gas Imaging (BGI) method. BGI does exactly what it says on the tin: a small amount of gas is inserted into the vacuum, increasing the rate of collisions around the interaction point, thus allowing LHCb to measure the beam profile without displacing the beams themselves. "To accomplish this, we obtained support from our vacuum group colleagues to use different noble gases, first neon, then helium, and finally argon," says Massimiliano Ferro-Luzzi, a physicist in the LHCb collaboration. "During the first few weeks of Run 2, using neon gas, we were able to measure the luminosity to a precision of 3.9% in one short LHC fill." This adds to LHCb's growing

catalogue of high-precision measurements using neon, including those taken during Run 1.

While these results are admirable achievements on their own, they have also opened the door to a whole new domain of physics explorations. Upon learning of this gas-injection system, cosmic-ray and heavy-ion physicists approached the LHCb team – all eager to develop new types of beam-gas analysis. Now, only five months into Run 2, LHCb has already had special proton-helium, proton-neon and proton-argon runs.

"In fact, we are exploring the full range of noble gases, as they can be safely injected into the LHC vacuum," explains Colin Barschel, an LHCb physicist. "Noble gases are not

(Continued on page 2)



### PUTTING SCIENCE AT THE HEART OF EUROPEAN POLICY

One year ago, the incoming European Commission President Jean-Claude Juncker shocked the scientific world by scrapping the post of Chief Scientific Advisor. This week, the Commission made amends by launching a well-considered Scientific Advisory Mechanism (SAM) that not only puts science back at the heart of policy, but does so in a much more structured and robust way than conferring such responsibility on a single individual.

(Continued on page 2)

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# A word from the DG

## PUTTING SCIENCE AT THE HEART OF EUROPEAN POLICY

The SAM has two independent strands: an advisory group of seven scientists, and funding through the Horizon 2020 programme for national academies and learned societies to network and collaborate on policy issues. Both are backed up by a secretariat at Commission headquarters in Brussels.

When Mr Juncker scrapped the role of Chief Scientific Advisor, it was against a backdrop of sometimes vitriolic attacks on the incumbent, Anne Glover, due to her outspoken views on GMOs. Mr Juncker's move was seen by some as simply giving in to a powerful lobby group, but the reality was rather more subtle. The Chief Scientific Advisor post was part of a larger advisors bureau whose functions have been reorganised over the last year: Mr Juncker's Commission chose to change the way the Commission receives advice on a large range of issues, not only science.

When Mr Juncker took office, I wrote to him, along with my fellow EIROforum Directors-

General, advising him to maintain a mechanism for independent and impartial scientific advice. I pointed out in the *Huffington Post* that scientific evidence is not an option in policy making, and suggested that some kind of body, such as the one announced this week, might offer a more structured and robust mechanism than a single advisor. I am very pleased that the Commission shares this view, all the more so since I have the privilege of being one of the first to serve on the Commission's new science advisory group.

Science is essential to policy. Today, science permeates every aspect of modern life, and it is to science that we must turn when we address the major societal issues facing the world and shaping our future. Issues such as climate, energy, food and water are challenging the way we inhabit and share this planet. They all present major hurdles to overcome, and none can be resolved by policy alone. To find a sustainable solution for each of them requires science. And for policy makers to steer the right course,

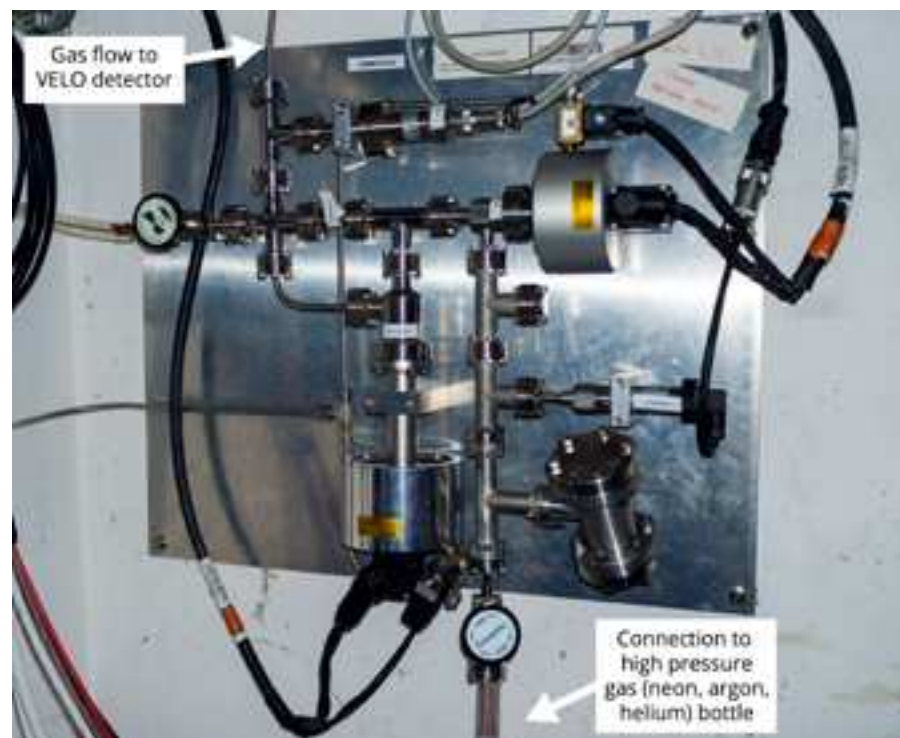
they need access to clear, level headed advice on subjects that frequently elicit an emotional response – subjects such as GMOs, for example. Whatever we may feel about GMOs, they deserve a rational, evidence-based debate in the policy arena because whatever policies we may develop, it's a fact that we are already struggling to feed a growing population, and it's a fact that current agricultural practices are not sustainable.

When Mr Juncker announced that he was doing away with the role of Chief Scientific Advisor, it seemed inconceivable to me that he would not replace the post with a new mechanism, and I said that I looked forward to seeing how he proposed to keep science at the centre of policy. One year on, I have to say that I like what I see, and am very much looking forward to meeting and working with my fellow members of the Commission's new science advisory group when we hold our first meeting in January.

Rolf Heuer

(Continued from page 1)

## OF VACUUM AND GAS



The gas injection system installed near the VELO detector at LHCb.

absorbed by the NEG coating and can be easily pumped out of the vacuum. Any remaining gas continues down the vacuum to the cold magnets, where it is 'captured' by the walls of the magnets. We've been able to do up to 24 hours of injection without any detrimental effect on the LHC performance."

### Helium: understanding antimatter in cosmic rays

One of the most exciting parts of LHCb's new beam-gas programme is undoubtedly the proton-helium analysis. Its story, however, begins far above the LHC... in detectors outside of Earth's atmosphere, hunting for antimatter in cosmic rays.

"Recent cosmic-ray measurements, notably by the AMS-02 detector, have shown an excess of antiprotons compared to protons in the cosmos," says Patrick Robbe, LHCb run coordinator and a physicist at LAL Orsay. "While these antiprotons may come from new physics processes, they may also be due to proton collisions with interstellar medium (primarily made up of helium and hydrogen). And while

(Continued from page 1)

our understanding of proton-hydrogen interactions is quite good, the proton-helium cross-section is not well known."

That's where LHCb comes into play: "Our cosmic-ray colleagues who are also involved with the PAMELA experiment quickly recognised the potential of the gas injection system: it could allow us to simulate the cosmic environment and measure the proton-helium cross-section in the relevant energy range," says Giacomo Graziani, who is responsible for the LHCb team at INFN Firenze. "These results should decrease the uncertainties on the computation of the antiproton flux, allowing cosmic-ray experiments to improve the interpretation of their measurements."

Giacomo's team is now examining the first proton-helium data, which was gathered in early October. Read more about the analysis in the box below.

### Argon: transforming LHCb into a fixed-target experiment

Moving down the periodic table, we find argon – an ideal candidate for heavy-ion physics. "With its higher number of nucleons, injecting argon into the vacuum increases the energy density of collisions," says Patrick. "During this coming lead-ion run, we will collide lead beams against this heavy argon 'fixed target'. The aim is to have a very high energy density, comparable to that of the

fixed-target experiments performed at the SPS in the 80s and 90s." These collisions will have lower multiplicities than lead-lead collisions, and so should be easier to analyse.

After the ion run, the LHC will enter the Christmas shutdown and its cold magnets, if required, will be brought up in temperature. At that time, the accumulated gases will be released and pumped out of the machine – wiping the slate clean for LHCb, which will continue to explore proton-gas collisions in 2016.

Katarina Anthony

### Did you know?

Developed solely for luminosity measurements, LHCb's gas-injection system does not measure the gas density at the interaction point precisely. Without this key factor to disentangle their data, the LHCb team had to develop an unconventional approach to "measuring".

The team is reverse engineering the gas-density, calculating the number of nuclei by studying known processes – namely, single-electron

scattering. "We are looking for single electrons scattered from helium, neon and argon atoms when hit by proton beams," says Giacomo. "The number of electrons allows us to work out the density of the gas at the collision point." This is accomplished with the help of a very "open" trigger that records almost 100% of the collision event data – including these single electrons.

## LHC REPORT: STUDIES FOR THE FUTURE

The proton run finished in the morning of Wednesday, 4 November and was followed by five days of Machine Development period, just before the start of the Technical Stop on Monday, 9 November. A lot of lessons have been learned and this opens the way to providing higher luminosity to the experiments.

During this year's third and final Machine Development period, the different teams working on the machine were able to deepen their understanding of beam control and beam dynamics. The careful study of beam instabilities revealed a major improvement during the year. This time, stabilising the beams in the LHC required much weaker octupole magnet stabilisation than during the previous Machine Development period. This was due to the very effective electron cloud scrubbing that took place during physics fills after the summer holidays. This opens the road towards having more bunches in the machine, higher bunch charge and thus higher luminosity.

To obtain high luminosities, beam sizes need to be as small as possible at the collision points in the experiments. However, once the beam becomes unstable during the process of energy ramping and squeezing, the so-called emittance blow-up cannot be recovered. For this reason a close tracking of the beam-size evolution along the LHC cycle was performed.

The study has pinned down processes that spoil the beam quality when starting with very small bunches, allowing dedicated optimisations to be considered in the future.

For the first time a bent crystal has been put in the beam halo of a full-energy 6.5 TeV proton beam, demonstrating the effectiveness of this material at deflecting the particle trajectory. A wide range of applications awaits this technology, including low-impedance collimation systems and beam injection and extraction systems.

An increased understanding of beam losses that take place when the beams are injected in the LHC was obtained by using diamond beam-loss monitors. Their fast response time on the nanosecond level enabled the source of these losses to be identified. Knowing the source, the losses can be reduced by cleaning the beam extracted from the SPS, and one can immediately measure this effect in the LHC.

Successful tests on the beta\*-levelling technique were also carried out during this

Machine Development period: beams were squeezed during collisions and proved to be remarkably stable. Thanks to this technique, experiments can receive constant luminosity at the beginning of a physics fill instead of having to deal with an initial pile-up that's too high. The levelling is achieved by colliding not fully squeezed beams during the first hours of the fill when the beam intensity is at its maximum and then reducing the beam size while the beam intensity reduces.

These are only a few highlights of the many tests carried out during the Machine Development days. Now it is up to the different teams to work out the wealth of measurement data and use it for future operation. The LHC team is highly grateful to all teams involved for adapting to a changing and not-always-convenient schedule.

According to the schedule, the LHC will resume operation on Wednesday, 18 November with a special proton-proton run at 2.51 TeV per beam, in preparation for the ion run that should start on Monday, 23 November.

Jan Uythoven & Rogelio Tomás García  
for the LHC team



# A BOOST FOR THE ISOLDE BEAMS

The first HIE-ISOLDE cryomodule was commissioned at the end of October. The radioactive ion beams can now be accelerated to 4.3 MeV per nucleon.



The ISOLDE beamline that supplies the Miniball array. The first HIE-ISOLDE cryomodule can be seen in the background, in its cryostat.

ISOLDE is getting an energy boost. The first cryomodule of the new superconducting linear accelerator HIE-ISOLDE (High Intensity and Energy ISOLDE), located downstream of the REX-ISOLDE accelerator, increases the energy of the radioactive ion beams from 3 to 4.3 MeV per nucleon. It supplies the Miniball array, where an experiment using radioactive zinc ions (see box) began at the end of October.

This is the first stage in the commissioning of HIE-ISOLDE. The facility will ultimately be equipped with four cryomodules that will accelerate the beams to 10 MeV per nucleon. Each cryomodule has five accelerating cavities and a solenoid, which focuses the beam. All of these components are superconducting.

This first beam is the result of eight years of development and manufacturing. One of the major challenges was the construction of the cavities. The HIE-ISOLDE cavities are made of copper coated with a thin layer

of niobium, a superconducting material. This technology, which had been used for the LEP and then for the LHC, had to be adapted to the more complex geometry of a quarter-wave cavity. "The production line for this type of superconducting cavity is now fully operational at CERN," says Walter Venturini Delsolaro, the deputy project leader (BE/RF). To date, ten cavities have been qualified for installation in the accelerator.

Assembling the cryomodule also presented a challenge. Unlike the LHC cryomodules, for example, in which the internal surfaces of the cavities are isolated from the other components, all the elements of the HIE-ISOLDE cryomodule are located in the same vacuum. The cryomodule is therefore more compact, which is essential given the limited space in the ISOLDE building. "Each cryomodule has around 10,000 components," says Yacine Kadi, the project leader (EN/HDO), "and none of them, not even the smallest screw, can be allowed to compromise the



Assembly of the first HIE-ISOLDE cryomodule, with its five niobium-on-copper cavities, in the new SM18 cleanroom.

cleanliness of the whole machine." Materials have been specially chosen to ensure that the components can be perfectly cleaned and that the quality of the vacuum is not degraded while the machine is running. A class ISO5 cleanroom was purpose-built for the assembly of the cryomodules.

An innovative system for aligning the components in the cryomodule using a laser has been developed by the survey team. "This system enables us to observe the position of the components remotely and, if necessary, to adjust it without opening the cryomodule," explains Venturini Delsolaro.

After a delicate assembly phase in the cleanroom, the first cryomodule was transported to the ISOLDE hall on 2 May and coupled to the existing REX-ISOLDE accelerator. The hardware commissioning began in the summer, and was followed in September by the first tests with stable beam, culminating in the acceleration of the first radioactive beam on 22 October. HIE-ISOLDE will run for a total of five weeks this year. During ISOLDE's technical stop between December 2015 and April 2016, another cryomodule will be coupled to the first, increasing the energy to 5.5 MeV per nucleon. Two other cryomodules will be produced from mid-2016 onwards, bringing the final energy to 10 MeV per nucleon for the heaviest nuclei available at ISOLDE.

Corinne Pralavorio

## Higher energies open ISOLDE to a new realm of physics experiments

A nucleus is a many-body quantum system, with a fixed number of neutrons and protons. Its behaviour, which is influenced by the individual nucleons as well as by the collective contribution of all the protons and neutrons, sheds light on the strong force at play in the nuclear medium.

Until now, beams at ISOLDE were only able to reach just enough energy to explore the collective properties of nuclei, but the higher energies provided by the newly commissioned HIE-ISOLDE will enable physicists

to investigate single particle behaviour in a nucleus and the interplay between collective and individual properties. The higher energy will now allow for nucleon transfer reactions on all radioactive nuclei produced at ISOLDE, including the heaviest ones.

Thirty experiments and over six hundred shifts have already been approved and will investigate a range of physics topics from isospin symmetry and collectivity versus single particle aspects, to shapes and shape coexistence. The first of these experiments is already running.

# LEP'S LEGACY CONTINUES AT THE ESS

The last components of a radio-frequency (RF) power station equipped with a LEP klystron were recently shipped to the city of Lund in Sweden. The station will be used as an integration test stand at the European Spallation Source (ESS), with the purpose of training ESS engineers for the setting up of 154 RF stations needed in Lund.



A truck with the LEP klystron has arrived at ESS, in Lund.

A klystron that was originally part of the Large Electron-Positron Collider (LEP), CERN's former flagship accelerator, will be used in the start-up phase of the world's largest neutron source, the ESS. If this klystron could speak, it would have a long and interesting story to tell.

During LEP decommissioning and dismantling, 44 klystrons were put aside to be used for other projects. For about 20 of them, the high-voltage part was adapted in



An artist's impression of what the ESS should look like in 2019.

order to accommodate Linac4's pulsed-RF operation. "Some of the klystrons were built in the 80s and already had 60,000 operation hours," says Olivier Brunner, leader of the team responsible for the Linac4 high-power RF system. "Nevertheless, it turned out that they worked perfectly well for powering Linac4's low-voltage cavities."

One of the refurbished klystrons was installed in an RF power station at the SM18 test stand

and used to test and condition a significant number of the Linac4 cavities. After the successful conditioning campaign, the RF power station with the LEP klystron found other uses. Since the end of October, its new home has been the test stand of the ESS, where it will be used to train ESS staff.

Indeed, the 154 RF transmitter stations that will be installed in 2019 in the ESS linear accelerator are, in many respects, similar to the Linac4 ones. In order to gain experience with the stations, the ESS staff will rehearse with the Linac4 power station. "This is especially important in view of the tight schedule of the ESS installation phase, which is planned for mid-2019 and envisages an average pace of one RF transmitter installed every 3.5 days," says David McGinnis, an engineer at ESS and the person in charge of the integration test stand.

If everything goes well, the LEP klystron, at around 30 years of age, will come back from Sweden in spring 2017 and become a back-up machine for Linac4.

Live long and prosper, LEP legacy!

Stefania Pandolfi

# CERN'S GOT TALENT

**TALENT is a Marie Curie Initial Training Network (ITN) project coordinated by CERN and funded under the European Commission's Seventh Framework Programme. From 23 to 25 November, the project's participants will present their achievements at the final event that will be held at IdeaSquare.**



The IBL sub-detector during its insertion in the heart of the ATLAS detector (May 2014) (Image: Heinz Pernegger/CERN).

TALENT's acronym stands for "Training for Career development in high-radiation Environment Technologies". Launched in 2012 by a collaboration of three research centres, seven universities and eight industrial partners and led by CERN, the project had the overall objective of building up the careers of young researchers in the field of instrumentation for future tracking detectors.

The test bed for TALENT's students has been the development of the Insertable B-Layer (IBL) sub-detector of ATLAS. The high-precision pixel detector was installed in May 2014 and has recently started to take data. Scientists participating in TALENT were involved in the development of three different types of radiation-hard pixel sensors – 3D, planar silicon and diamond. Moreover, they helped develop the IBL's new read-out system, as well as lighter mechanics and an innovative CO<sub>2</sub>-based cooling system. "These technological improvements are a major stepping stone for the development of the next-generation precision tracking detectors that are being designed for the HL-LHC project," explains Heinz Pernegger, TALENT's scientific network coordinator and former ATLAS Pixel Project leader.

Alongside the development of high-performance detector technologies, TALENT was also involved in finding industrial

applications for them. By collaborating closely with economics students, the TALENT team was able to design comprehensive business plans for the most promising commercial spin-offs of these new key enabling technologies. "We came up with ideas for new industrial applications that we could use in the TALENT follow-up project, called STREAM," adds Pernegger. Like TALENT, STREAM will be organised in the Marie Curie ITN framework and coordinated by CERN, but it will focus on the development of innovative radiation-hard, smart CMOS sensor technologies for scientific and industrial applications.

More information on the TALENT concluding event at IdeaSquare can be found on: <http://cern.ch/go/zSL6>.

Stefania Pandolfi



# CERN'S JOB DIVERSITY ON DISPLAY AT THE CITÉ DES MÉTIERS

From 3 to 8 November, CERN took part in the *Cité des Métiers* careers fair in Geneva. Almost 10,000 people stopped by the Organization's stand, where they were introduced to the wide range of professions practised at CERN.



Stefano Agosta, a telecommunications expert from the IT department, performs a geolocalisation demonstration with digital radio receivers for visitors to the CERN stand.

Network engineering, computer graphics, geomatics, translation, video production, fire and rescue, law, computer-aided design... People often don't realise how varied the job opportunities are at CERN. More than one hundred professions are present at the Laboratory. This was the message conveyed by representatives of various departments, including human resources and the visits service, at the CERN stand at the *Cité des Métiers* careers fair, from 3 to 8 November. CERN's stand was part of the International Geneva section of the exhibition. Throughout the six-day event, CERN experts were on hand to discuss around twenty professions and perform demonstrations for young people looking for careers information. It was a great success: around 10,000 people visited the stand and discovered that although CERN's focus is physics, it's not just physicists who work here!

Corinne Pralavorio

## OPEN ACCESS E-BOOKS COME INTO PLAY

According to the Directory of Open Access Journals, more than 10,000 journals are available on an open access (OA) basis. Building on this success, e-books are also now becoming available under this popular publishing scheme, proving that open access is steadily gaining momentum in scholarly scientific communication.

The economic model is largely inspired by well-established experience in the publishing of articles, and several publishers have expanded their OA programmes to include books. Today, negotiations with such publishers make it possible for books to be available with an appropriate licence, according to which the authors retain copyright while the content can be freely shared and reused, provided the author is credited appropriately.

The introduction of e-books, in addition to expanding the diffusion of the written word and the relevant content, helps avoid the costs of the production and distribution of paper books that result in high prices for titles, making them accessible only to libraries. OA e-books are also an ideal outlet for the publication of conference proceedings, maximising their visibility, with great benefits for libraries' budgets.

Five key works edited by CERN authors are already benefiting or are set to benefit from the impact of free diffusion.

Three are already accessible online:

- *Melting hadrons, boiling quarks: From Hagedorn temperature to ultra-relativistic heavy-ion collisions at CERN, with a tribute to Rolf Hagedorn*, Johann Rafelski (ed.), published by Springer (<http://cern.ch/go/TQS9>).
- *60 years of CERN experiments and discoveries*, Herwig Schopper and Luigi Di Lella (eds.), published by World Scientific (<http://cern.ch/go/HGs9>).
- *The High Luminosity Large Hadron Collider: the new machine for illuminating the mysteries of the Universe*, Lucio Rossi and Oliver Brüning (eds.), published by

World Scientific (<http://cern.ch/go/8xkN>).

Two further OA titles will appear in 2016:

- *The Standard Theory of Particle Physics: 60 Years of CERN*, Luciano Maiani and Luigi Rolandi (eds.), published by World Scientific.
- *Technology meets research: 60 years of technological achievements at CERN illustrated with selected highlights*, Chris Fabjan, Thomas Taylor and Horst Wenninger (eds.), published by World Scientific.

Whether you are member of the organising committee of a conference and are looking for an OA outlet for the proceedings, or whether you plan to publish a book, we invite you to get in touch with the Library so that we can help you to negotiate the conditions with potential publishers.

Tullio Basaglia

## Computer Security

### CONFIDENTIALITY IS EVERYBODY'S BUSINESS

Recently, a zip file with confidential information was mistakenly made public on one of CERN's websites. Although the file was only intended for members of an internal committee, when placing it onto the CERN website, someone made a mistake when setting the access permissions and, thus, made the file accessible to everyone visiting the site!

Unfortunately, this is but one example of such mistakes. We have seen other documents made accessible to a much wider audience than originally intended...

CERN takes serious measures to ensure the confidentiality of data. Confidential or "sensitive" documents (following the nomenclature set out in the CERN Data Protection Policy on: <http://cern.ch/go/Z9hJ>) deserve professional handling and access protections given only to the people who really need to access them. As such, they must not be widely circulated as attachments in e-mails and, most definitely, must not be stored on random public websites for the sole purpose of sharing them. Instead, these documents should reside in their original storage location (like AFS, Alfresco, CDS, DFS, EDMS, INDICO, Sharepoint) and the corresponding access

controls should be adapted so that all people who need access are granted it and everyone else's access is blocked.

The level of protection is clearly marked in EDMS ("Public access", "Restricted access") and INDICO ("public", "restricted" or edit the event and check the "Protection" tab). For AFS and DFS, instructions for properly protecting files can be found on: <http://cern.ch/go/w9R9> and on: <http://cern.ch/go/8Vtx>, respectively.

Confidentiality is everybody's business! Think twice before passing on sensitive documents. Act professionally and use your judgment. Keep the document in its original place and just share its link or location.

Alternatively, use CERNbox, which even allows you to share documents with people

who don't have a CERN computing account. However, still remember to configure the access protections as restrictively as possible. Remember, members of the personnel are accountable for maintaining the confidentiality of the data entrusted to them. Any breach of that trust may lead to administrative or even disciplinary action.

For further information, questions or help, check: <https://security.web.cern.ch> or contact us at [Computer.Security@cern.ch](mailto:Computer.Security@cern.ch).

Do you want to learn more about computer security incidents and issues at CERN? Follow our Monthly Report: <https://cern.ch/security/reports/fr/monthly-reports.shtml>.

Stefan Lueders, Computer Security Team

## Ombud's Corner

### SEXUAL HARASSMENT - WHO IS CONCERNED?

About one year since I last covered the topic of sexual harassment, I am returning to this theme again as it continues to be raised in the Ombud office. This trend is likely to continue as long as everyday sexism and harassment remain hidden and our workplace culture persists in turning a blind eye to these issues...

In previous articles, we discussed how to say "stop" to unwelcome behaviour and what to do when the situation persists. We also discussed what is meant by harassment, defined in CERN's Operational Circular No. 9 as "...unwelcome behaviour that has the effect of violating a person's dignity and/or creating a hostile work environment..." Finally, we underlined the need to promote a peer culture that recognises the early signs of any behaviour that risks deteriorating into harassment. So, what more is there to say?

Sexual harassment in the workplace remains an invisible issue as people continue to feel uncomfortable about tackling it and often hesitate to speak up for fear of not being

taken seriously or, worse still, being labelled as humourless or troublemakers. Even when they do find the courage to voice their concerns, they find themselves dismissed as the problem is belittled and their experience gets buried as just another example of the everyday sexism that is so familiar that it has been normalised.

Everyday sexism is insidious and can take many forms in the workplace: it could be the colleague who insists on standing too close to you in the coffee queue, the co-worker who comments on your appearance as you prepare to make a professional presentation, the group who remain silent when a team member greets your arrival with an off-colour

joke or the supervisor who holds your hands to reassure you when a critical piece of your work goes wrong. Whatever form it takes, it can be said to be inappropriate behaviour if it leaves you feeling in some way humiliated or at a disadvantage.

"I really feel uncomfortable when you do/say... – please stop!"

Colleagues who have had the courage to speak up in such situations have reported a variety of reactions to this request, ranging from denial: "Come on – it was a compliment" to challenge: "Aren't you over-reacting?" or a put down: "Man-up – it was just a bit of fun" or even an abuse of power: "I could see that you were upset and I wanted to comfort you". Others have reported that this request was either laughed at or simply ignored by those concerned at the time.

The examples that have been brought to the Ombud office tell us that, despite this

behaviour being proscribed by our Code of Conduct, everyday sexism persists in our workplace; that, while it affects mainly women, some men also report being subjected to it; and that it has been so far normalised into our workplace culture that attempts to put a stop to it have tended to fail.

So how does this concern you? Have you ever been in a situation where you witnessed this kind of behaviour? Have you ever asked any of your colleagues whether they have experienced this type of harassment and then really stopped to listen to what they say? And how would you react if one of your

colleagues were to actually share such an experience with you?

A single incidence of everyday sexism may or may not amount to sexual harassment but there can be no doubt that a workplace climate that tolerates this type of behaviour through a culture of acceptance is one that exposes its members to the risk of potential harassment.

Whilst CERN has established channels by which to address harassment through either informal or formal procedures, it remains up to each of us as individuals to support all efforts

to put a stop to it and not allow everyday sexism to persist. It is not only a matter of behaviour that has to be challenged and addressed; it is also the underlying mindset that needs to change.

*All previous Ombud's Corners can be accessed in the Ombud's blog.*

*Sudeshna Datta-Cockerill*

## Official news

### FAMILY BENEFITS - OBLIGATION TO PROVIDE INFORMATION

**Pursuant to Article R V 1.38 of the Staff Regulations, members of the personnel are reminded that they are required to inform the Organization in writing, within 30 calendar days, of any change in their family situation (marriage, partnership, birth of a child, etc.) and of the amount of any financial benefit of a similar nature to those provided for in the Staff Regulations (e.g. family allowance, child allowance, infant allowance, non-resident allowance or international indemnity) to which they or a member of their family may be entitled from a source other than CERN.**

The procedures to be followed are available in the Admin e-guide:

**<https://admin-eguide.web.cern.ch/en/procedure/change-family-situation>**

Members of the personnel are also reminded that any false declaration or failure to make a declaration with a view to deceiving others or achieving a gain resulting in a loss of funds or reputation for CERN constitutes fraud and may

lead to disciplinary action in accordance with Article S VI 2.01 of the Staff Rules.

*Human Resources department  
HR-Family.Allowance@cern.ch*

### TEMPORARY REINTRODUCTION OF BORDER CONTROLS AT FRENCH BORDERS INSIDE THE SCHENGEN AREA

**The French authorities have informed CERN that, in view of the upcoming COP21 Paris Climate Conference, France will exceptionally reintroduce controls at its borders with Schengen states for one month from 13 November to 13 December 2015. All border posts and crossing points between France and Switzerland will be affected by this measure.**

Members of the personnel are therefore reminded that, when crossing borders within the Schengen Area\*, they must carry:

1. either, in the case of citizens of European Economic Area (EEA) countries

- and Switzerland, an official identity document (identity card or passport);
2. or, in the case of non-EEA and non-Swiss citizens, an identity document together with a Schengen visa if they are subject to this obligation, or an identity document together with a residence permit issued by a Schengen state\*\* if they have one.

The French authorities will make every effort to limit the impact of this measure on cross-border traffic, and wish to thank the members of the CERN personnel for their understanding.

*\* Please see: <http://cern.ch/go/ZJW8> and <http://cern.ch/go/Nq9d>.*

*\*\*The special residence permits issued by the French Ministry of Foreign Affairs and International Development and the "legitimation cards" issued by the Swiss Federal Department of Foreign Affairs are Schengen residence permits that allow travel within the Schengen Area. However, they are not recognised as official identity documents, irrespective of the holder's nationality.*

## Take note

### CERN'S 2016 BEAMLINE FOR SCHOOLS COMPETITION STARTS ON 17 NOVEMBER

**Spread the word: CERN is offering high-school students from around the world the chance to create and perform a scientific experiment on a CERN accelerator beamline. What better way to learn about physics?**

Now in its third year, the Beamline for Schools competition is open to teams of at least five students aged 16 and with at least one adult supervisor or "coach".

Students can find out about the beamline and facilities via <http://cern.ch/bl4s>, then think of a simple, creative experiment. They can register their team from 17 November to start receiving e-mail updates. They then submit a written proposal and a short video by 31 March 2016. The winners will be announced in June and will come to CERN, preferably in September 2016. Previous winners have tested webcams and classroom-grown crystals at the beamline, others have studied how particles decay and investigated high-energy gamma rays.

All participants will receive a certificate. Shortlisted teams will win a BL4S t-shirt for each team member and a cosmic-ray detector for the school, and some will be offered the chance to visit a physics laboratory near them. For the winning team(s), between five and

nine members and up to two adult coaches per team will be invited to CERN, all expenses paid, for 10 days to carry out their experiments at the beamline.

**Registration opens 17 November:**  
**<http://cern.ch/bl4s>.**

*The project is funded in part by the Alcoa Foundation; additional contributions are received from National Instruments.*

### CERN OPENLAB TO HOST INNOVATION AND ENTREPRENEURSHIP EVENT | 26 NOVEMBER

**Do you have a bright idea for a business? The first-of-its-kind 'CERN openlab Innovation and Entrepreneurship Event' is a great opportunity for you to explore it further. The event, which is being organised in collaboration with the CERN Knowledge Transfer Group and IdeaSquare, will take place on Thursday, 26 November. This full-day event is also supported by CERN openlab partner company Intel as part of a joint project on innovation and entrepreneurship.**

During the morning session, experts from a variety of organisations will speak on diverse subjects related to both innovation and

entrepreneurship. From commercialisation and start-up funding to marketing and social impact, the broad range of topics covered by these talks will provide a valuable learning opportunity.

CERN personnel and users are encouraged to come forward with their own innovative ideas for the event. There will be the opportunity to privately discuss these ideas on a one-to-one basis with the experts in the afternoon, with a view to helping CERN personnel and users assess the technical and business feasibility of their proposals (in strict confidentiality).

"The primary mission of our public-private partnership is to accelerate the development of cutting-edge solutions for the worldwide LHC community," says Alberto Di Meglio, head of CERN openlab. "We're now pleased to be collaborating with the CERN Knowledge Transfer Group and IdeaSquare on this event to contribute to the development of innovative ideas with potential applications beyond high-energy physics."

*For more information and to register, please visit the event's Indico page on: <http://cern.ch/go/j9Nj>.*

*CERN openlab*





**CERN SHOP CHRISTMAS SALE**  
30.11.2015 – 18.12.2015

Looking for Christmas present ideas?

CERN card holders will have a special reduction of 10% on all CERN shop articles  
SPECIAL OFFER: 50% reduction on Higgs DVD

On Friday 18th December, CERN shop will be closed at 12

À la recherche d'un cadeau pour Noël ?

Les détenteurs d'une carte CERN auront une réduction spéciale de 10% sur tous les articles de la boutique CERN  
OFFRE EXCEPTIONNELLE : 50% de réduction sur le DVD Higgs

Le vendredi 18 décembre, la boutique CERN sera fermée à 12h

CERN SHOP Building 33

## Seminars

### TUESDAY NOVEMBER 24, 2015

- 11:00 **EP Seminar:** CERN Computer Security: Abuse, Blunder and Fun  
Main Auditorium
- 14:00 **Preparation for retirement seminar:** Leaving CERN - Quitter  
le CERN Council Chamber
- 17:00 **Miscellaneous:** York ATLAS meeting

### WEDNESDAY NOVEMBER 25, 2015

- 14:30 **ISOLDE Seminar:** TBA: PIENU ISOLDE visitor's room
- 14:30 **ISOLDE Seminar:** TBA

### THURSDAY NOVEMBER 26, 2015

- 16:30 **CERN Colloquium:** Seeds of the Future Council Chamber

### FRIDAY NOVEMBER 27, 2015

- 08:30 **Quarterly induction HR:** INDUCTION PROGRAMME - 2nd Part  
Council Chamber

### MONDAY NOVEMBER 30, 2015

- 14:00 **CERN Computing Seminar:** High performance in software  
development IT Amphitheatre

### TUESDAY DECEMBER 01, 2015

- 08:30 **Monthly induction HR:** INDUCTION PROGRAMME - 1st Part  
5/4-006
- 08:45 **Safety:** Formation "Délégué à la sécurité territoriale (TSO) -  
Initial" 6959/R-002
- 11:00 **LHC Seminar:** ALICE results
- 17:00 **Miscellaneous:** York ATLAS meeting

## Supplemental

### NEWS

#### FROM THE CERN WEB: PHOTOWALK, IPPOG AND MORE

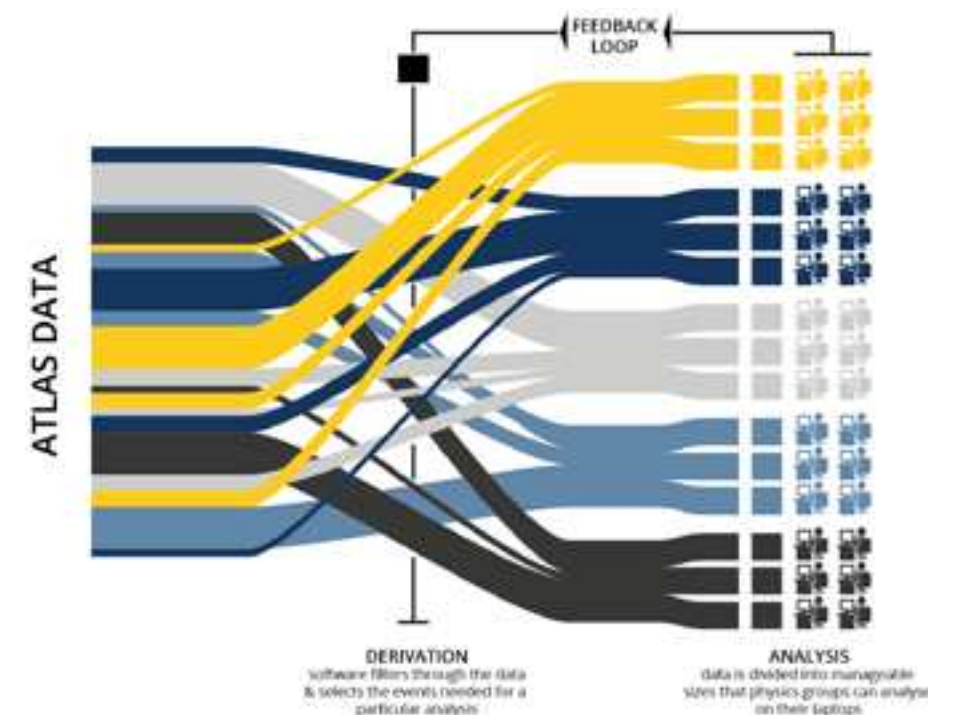
This section highlights articles, blog posts and press releases published in the CERN web environment over the past weeks. This way, you won't miss a thing...

#### Behind very great results lies great computing

13 November – Katarina Anthony

At the ATLAS experiment, masterful computing infrastructure is transforming raw data from the detector into particles for analysis, with a set direction, energy and type.

Continue to read on: <http://cern.ch/go/BH9F>.



(Infographic by Nicola Quadri.)

#### 20 birthday candles for LHCb

5 November – LHCb Collaboration

In August 1995, a Letter of Intent was submitted for LHCb, the world's first dedicated b-physics experiment at a hadron collider. On 5 November, the LHCb Collaboration marked the 20th anniversary of this event with a special celebratory meeting.

Continue to read on: <http://cern.ch/go/B7px>.



(Cartoon: Adrien Miqueu)



## 'Photowalk': Vote for your favourite pictures!

10 November - by Julie Haffner and Joanna Iwanska



(Image: CERN/Andrew Richard Hara)

CERN has announced the winners of its 'Photowalk 2015: Behind the Scenes' competition. The three winning photographs, selected from among 160 entries, will now go on to be judged in a global competition.

Continue to read on: <http://cern.ch/go/ms6P>.

## Tenth IPPOG meeting at CERN

10 November - ALICE Collaboration



The 10th meeting of the IPPOG was held at CERN from 5 to 7 November 2015.

IPPOG (International Particle Physics Outreach Group) is an international network of physicists, science communicators and educators from all CERN Member States, major particle physics laboratories and the LHC experiments, as well as some representatives

from non-Member States like the USA and Australia, which is the newest member of IPPOG, officially voted in this year. Its main goal is to popularise the scientific method through a variety of outreach activities aimed at people of all ages. The final aim is to emphasise the importance of research and more specifically – what is the purpose of big laboratories like the LHC and Fermilab and why it is important to study the sub-atomic world and the laws that govern it.

Continue to read on: <http://cern.ch/go/7pcm>.

## TAKE NOTE

### TEDxCERN PRESENTS TEDYOUTH 2015

On Saturday, 14 November at IdeaSquare, TEDxCERN is going to live webcast the first session of TEDYouth 2015.



TEDYouth 2015 is taking place in New York and the theme of the event is "Made in the Future". This event will provide the young audience with new perspectives on their own future job possibilities - thinking beyond traditional careers, some of which may not yet exist.

TEDxCERN is organising a webcast viewing party for the first session of TEDYouth, live from TED in New York. The talks are aimed at middle school and high school students, and children of CERN members and friends.

**Saturday, 14 November**  
**4.30 p.m. to 6.30 p.m.**  
**IdeaSquare (Building 3179)**

The event is free of charge but registration on: <http://cern.ch/go/89JK> is required for every participant. The number of seats is limited.

The talks are in English. If you are a CERN member of the personnel, please come

directly to IdeaSquare. If you don't have a CERN access card, the meeting point will be in front of the CERN Reception (Bldg. 33) at 4.30 p.m.

More info on the live webcast event can be found on: <http://cern.ch/go/89JK>.

#### Update on TEDxCERN 2015 videos

TEDxCERN 2015 videos should be available online any time now. Please follow the TEDxCERN social media channels (Facebook, Twitter) to know when they have become public.

### PLEASE EXERCISE EXTREME CAUTION AT THE SAINT-GENIS ROUNDABOUT

**In the interests of enhanced safety, a new pathway for pedestrians and cyclists has been constructed around the outside of the Saint-Genis roundabout. However, the markings of the previous cycle path, which is now closed to traffic, are still visible and can cause confusion. We therefore call on everyone to exercise extreme caution and to use the new pathway.**

New two-way markings have been laid out, inviting pedestrians and cyclists coming from the direction of Saint-Genis-Pouilly to go towards the Swiss border or CERN Entrance E using the left-hand side of the roundabout (i.e. the Prévessin side). So, from now on, cyclists must no longer go around the roundabout on the right-hand side and

pedestrians will no longer have to cross the D884 dual carriageway.

Similarly, people staying at the Saint-Genis hostel are invited to follow these new markings to get to CERN or to return to the hostel, which means they will avoid having to cross the D35 highway at a spot where traffic is generally very fast.

EXTREME CAUTION must be exercised and the still-visible old road markings must not be followed.

### VACCINATION AGAINST SEASONAL FLU

**The Medical Service once again recommends you to get your annual flu vaccination for the year.**

Vaccination is the most effective way of avoiding the illness and any serious consequences and protecting those around you. The flu can have especially serious consequences for people with chronic conditions (diabetes, cardio-vascular disease, etc.), pregnant women, infants, and people over 65 years of age.

Remember, anyone working on the CERN site who wishes to be vaccinated against seasonal flu should go to the Infirmary (Building 57, ground floor) with their vaccine.

The Medical Service will issue a prescription on the day of the vaccination for the purposes of reimbursement by UNIQA.

NB: The Medical Service cannot provide this vaccination service for family members or

retired members of the personnel.  
For more information:

- The "Seasonal flu" flyer by the Medical Service (<http://cern.ch/go/TS9B>)
- Recommendations of the Swiss Federal Office of Public Health (<http://cern.ch/go/zCW9>)

CERN Medical Service

### CERN LIBRARY | KONRAD KLEINKNECHT PRESENTS: "RISIKO ENERGIEWENDE: WEGE AUS DER SACKGASSE" | 19 NOVEMBER

**Thursday, 19 November 2015 at 4 p.m.**  
**CERN Library (52-1-052)**  
Coffee will be served at 3.30 p.m.

The opting-out from the nuclear energy programme in Germany was hastily decided in the summer of 2011. Now it has become evident that there are no realistic plans for the conversion of the energy supply infrastructure in the foreseen ten-years time frame. Time is too short to reorganise our whole energy distribution system and consequently our economy. What is missing is a solid empirical base to tackle the issues of the reliability of supply, of the affordability, of the economical impact and social justice. Therefore, this conversion risks to be a failure, due to its contradictions. In his book, Konrad Kleinknecht tries to identify problems and to find solutions. For him, the following questions arise: how far can we cover part of the energy provision through wind and solar energy? What sources of energy are efficient and reliable? Can we phase out coal power plants? Do we need new power lines? How do we store current? How likely is the risk of

a power outage in a night without wind? Are the prices of energy going to further increase? Is it still possible to avoid the strong risks of the energy conversion though a major reform of the "Renewable Energy Act" (Erneuerbare-Energien-Gesetzes, EEG)?

Energy provision must serve the Public Good and profit Germany as an industry location. A blackout would be a catastrophe for the whole country, and it must be avoided by all means.

"Risiko Energiewende: Wege aus der Sackgasse", by K. Kleinknecht, Springer, 2014, ISBN 9783662468876.

CERN Library

### UNIVERSITY OF GENEVA | CONFERENCES IN NOVEMBER

To celebrate the 20th anniversary of Michel Mayor and Didier Queloz's discovery of the first extrasolar planet, the University of Geneva is organising a lecture featuring the two astrophysicists | On the occasion of the centenary of General Relativity, NCCR SwissMAP together with the mathematics and physics departments of the University of Geneva is organising a series of 4 colloquia.



Conferences in French (except on 24 November). For more information, go to: <http://cern.ch/go/RDd9>.



Lecture in French. For more information, go to: <http://cern.ch/go/XHL8>.



## LEARNING

### PLACES AVAILABLE - TECHNICAL MANAGEMENT COURSES (UP TO THE END OF 2015)

Please find here the courses in the field of technical management scheduled up to the end of 2015 and which have places available.

For more details about a course and to register, please go to the Training Catalogue.

If you need a course that is not in the catalogue, please contact your supervisor, your Departmental Training Officer or the HR-LD group at [Communication.Training@cern.ch](mailto:Communication.Training@cern.ch).

### PLACES AVAILABLE - LEADERSHIP PROGRAMME (UP TO THE END OF 2015)

Please find here the courses in the field of leadership scheduled up to the end of 2015 and which still have places available.

For more details about a course and to register, please go to the Training Catalogue.

If you need a course that is not in the catalogue, please contact your supervisor, your Departmental Training Officer or the HR-LD group at [Communication.Training@cern.ch](mailto:Communication.Training@cern.ch).

### PLACES AVAILABLE - PERSONAL DEVELOPMENT AND COMMUNICATION COURSES (UP TO THE END OF 2015)

Please find here the courses in the field of personal development and communication scheduled up to end of 2015 and which still have places available.

For more details about a course and to register, please go to the Training Catalogue.

If you need a course that is not in the catalogue, please contact your supervisor, your Departmental Training Officer or the HR-LD group at [Communication.Training@cern.ch](mailto:Communication.Training@cern.ch).

Upcoming Technical Management courses (in chronological order)

	Language	Next Session	Duration	Available places
Procurement of supplies at CERN up to 200 000 CHF – e-learning	English	n/a	1 hour	n/a
Achats de fournitures au CERN jusqu'à 200 000 CHF – e-learning	français	n/a	1 hour	n/a
Project Scheduling and Costing	English	13/14 October	2 days	3
Managing by Project GPM	English	21/22 October	2 days	2
Selecting the right person for CERN	English	19 November	1 day	6
Procurement and Contract Management of Supplies	English	24 November	1 day	3
Project Engineering	English	10/11 December	2 days	8
Innovation Management in Horizon 2020	English	11 December	5 hours	17
Gestion de la maintenance	French	14/16 December	2.5 days	6

Extra Session

New

New

	Language	Next Session	Duration	Available places
Éléments essentiels de la gestion du personnel pour les superviseurs (adapté de « CDP pour superviseurs »)	French	Module 1 - 2, 3 November Module 2 - 11 December Module 3 - 21, 22 January	5 days	8 places
Comment, en tant que superviseur, tirer le meilleur parti de l'entretien annuel	French	20 November	1 day	8 places
How to get, as a supervisor, the most out of the annual interview	English	30 November	1 day	10 places

Newly launched communication course

Communiquer avec impact	French	12, 13 November	2 days	5 places
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	Language	Next Session	Duration	Available places
Voice and Nonverbal Behaviour in Speech Communication	English	19-20 November	2 days	4 places
Communicating to Convince	English	23-24 November	2 days	4 places
Négociation efficace	French	3-4 November	2 days	9 places
Les enjeux de la voix et du comportement non verbal dans la communication orale	French	5-6 November	1.5 days	6 places
Handling Difficult conversations	English	20 November 27 November 5 February 2016	3 days	3 places
Animer ou participer à une réunion de travail	French	30 November 1, 2 December	3 days	5 places
Communiquer pour convaincre	French	25-26 November	2 days	7 places

The following places are available on the newly launched Communication workshops:

	Language	Next Session	Duration	Available places
Communication: Science or Art? (Workshop 1)	English	19 November	1 day	7
Communication : Science ou Art ? (Atelier 1)	French	27 November	1 day	8
Communiquer avec succès en milieu interculturel (Atelier 2)	French	4 December	1 day	5
Effective Cross Culture Communication (Workshop 2)	English	20 November	1 day	7

## SAFETY TRAINING: PLACES AVAILABLE IN NOVEMBER AND DECEMBER 2015

There are places available in the forthcoming Safety courses. For updates and registrations, please refer to the Safety Training Catalogue on: <http://cern.ch/go/8tpW>.

Title of the course EN	Title of the course FR	Date	Hours	Language
Installation Specific Safety				
ALICE - Confined Space	ALICE - Espace confiné	05-Nov-15 to 09-Nov-15	14.00 - 16.00 and 9.00 - 10.00	English
ALICE - Underground - Guide	ALICE - Souterrain - Guide	10-Dec-15 to 14-Dec-15	14.00 - 16.00 and 9.00 - 10.00	English
CMS - Shift Leader in Matters of Safety (SLiMoS)	CMS - Chefs d'équipe en matière de sécurité (SLiMoS)	13-Nov-15	13.00 - 17.00	English
		27-Nov-15	13.00 - 17.00	English
		11-Dec-15	13.00 - 17.00	English
CMS - Underground - Guide	CMS - Souterrain - Guide	02-Nov-15	14.00 - 17.00	English
ISOLDE - Experimental Hall - Electrical Safety - Handling	ISOLDE - Hall d'expérience - Sécurité électrique - Manipulation	03-Nov-15	13.00 - 14.30	English
		17-Nov-15	13.00 - 14.30	English
		23-Nov-15	13.00 - 14.30	English
ISOLDE - Experimental Hall - Radiation Protection - Handling	ISOLDE - Hall d'expérience - Radioprotection - Manipulation	03-Nov-15	14.30 - 17.00	English
		17-Nov-15	14.30 - 17.00	English
		23-Nov-15	14.30 - 17.00	English
Electrical Safety (EL)				
Habilitation électrique - Electrician Low Voltage - Initial	Habilitation électrique - Électricien basse tension - Initial	09-Dec-15 to 11-Dec-15	9.00 - 17.30	English
Habilitation électrique - Electrician Low and High Voltage - Initial	Habilitation électrique - Électricien basse et haute tensions - Initial	17-Nov-15 to 20-Nov-15	9.00 - 17.30	English
Habilitation électrique - Electrician Low and High Voltage - Refresher	Habilitation électrique - Électricien basse et haute tensions - Recyclage	23-Nov-15 to 24-Nov-15	9.00 - 17.30	French
		07-Dec-15 to 08-Dec-15	9.00 - 17.30	English
Habilitation électrique - Non-Electrician - Initial	Habilitation électrique - Non-électricien - Initial	16-Nov-15	9.00 - 17.30	English
		01-Dec-15	9.00 - 17.30	English
Habilitation électrique - Non-Electrician - Refresher	Habilitation électrique - Non-électricien - Recyclage	30-Nov-15	9.00 - 17.30	English
Habilitation électrique - Person making tests in labs or on test-stands - Initial	Habilitation électrique - Personnel réalisant des essais en laboratoire ou en plateforme d'essai - Initial	23-Nov-15 to 25-Nov-15	9.00 - 17.30	English
Habilitation électrique - Electrician Low Voltage - Working with power on	Habilitation électrique - Électricien basse tension - Travaux sous tension	19-Nov-15 to 20-Nov-15	9.00 - 17.30	French
		23-Nov-15 to 24-Nov-15	9.00 - 17.30	French
		07-Dec-15 to 08-Dec-15	9.00 - 17.30	French



Fire (FS)				
Fire Extinguisher	Extincteur d'incendie	05-Nov-15	10.30 - 12.00	French
		05-Nov-15	14.00 - 15.30	French
		12-Nov-15	14.00 - 15.30	English
		13-Nov-15	10.00 - 11.30	French
		16-Nov-15	10.30 - 12.00	English
		16-Nov-15	14.00 - 15.30	English
		20-Nov-15	10.30 - 12.00	English
		20-Nov-15	14.00 - 15.30	English
		24-Nov-15	10.30 - 12.00	French
		24-Nov-15	14.00 - 15.30	French
Mechanical Safety (M)				
Cryogenic Safety - Fundamentals	Sécurité Cryogénie - Fondamentaux	11-Nov-15	14.00 - 16.00	French
Cryogenic Safety - Helium Transfer	Sécurité Cryogénie - Transfert d'hélium	19-Nov-15	9.30 - 12.00	English
Electrical Palett Truck - Driving	Transpalette électrique - Conduite	16-Nov-15	8.30 - 12.30	French
Overhead Crane - Operator and Slinger - Initial	Pontier-élingueur - Initial	10-Dec-15 to 11-Dec-15	8.30 - 17.30	French
Overhead Crane - Operator and Slinger - Refresher	Pontier-élingueur - Recyclage	09-Dec-15	8.30 - 17.30	French
Non-ionizing Radiation (NIR)				
Laser - Expert	Laser - Expert	09-Nov-15 to 10-Nov-15	9.00 - 17.30	English
Laser - User	Laser - Utilisateur	19-Nov-15	9.00 - 12.30	English
Radiation Protection (RP)				
Radiation Protection - Controlled Area - CERN Employees and Associates	Radioprotection - Zone contrôlée - Employés et associés CERN	02-Nov-15	9.00 - 17.00	English
		16-Nov-15	9.00 - 17.00	English
		25-Nov-15	9.00 - 17.00	English
		26-Nov-15	9.00 - 17.00	French
		02-Dec-15	9.00 - 17.00	English
Safety Organisation (SO)				
Safety in Projects	Sécurité dans les projets	18-Nov-15	14.00 - 17.00	English
Territorial Safety Officer (TSO) - Initial	Délégué à la sécurité territoriale (TSO) - Initial	01-Dec-15 to 03-Dec-15	8.45 - 17.30	French
Safety and Health (SH)				
Ergonomics	Ergonomie	05-Nov-15	09:00 - 12:00	English
Self-Rescue Mask - Initial	Masque auto-sauveteur - Initial	02-Nov-15	10.00 - 12.00	French
		02-Nov-15	14.00 - 16.00	French
		09-Nov-15	14.00 - 16.00	English
		16-Nov-15	10.00 - 12.00	English
		23-Nov-15	14.00 - 16.00	English
		07-Dec-15	10.00 - 12.00	French
		07-Dec-15	14.00 - 16.00	English

Self-Rescue Mask - Refresher	Masque auto-sauveteur - Recyclage	03-Nov-15	10.00 - 12.00	French
		05-Nov-15	10.00 - 12.00	English
		12-Nov-15	10.00 - 12.00	English
		17-Nov-15	10.00 - 12.00	French
		18-Nov-15	10.00 - 12.00	English
		19-Nov-15	10.00 - 12.00	French
		24-Nov-15	10.00 - 12.00	French
		26-Nov-15	10.00 - 12.00	English
		01-Dec-15	10.00 - 12.00	French
		03-Dec-15	10.00 - 12.00	French
		08-Dec-15	10.00 - 12.00	French
		10-Dec-15	10.00 - 12.00	English
Worksite (WS)				
Confined space	Espace confiné	17-Nov-15	9.00 - 17.30	French
Scaffolding - Accepting	Échafaudage - Réception	23-Nov-15 to 24-Nov-15	9.00 - 17.30	French
Working at Heights - Using a harness	Travail en hauteur - Utilisation du harnais	04-Nov-15	9.00 - 17.30	English
		07-Dec-15	9.00 - 17.30	French

## PREPARING FOR RETIREMENT - NEW SEMINARS

We would like to take the opportunity to inform you about a new programme related to retirement, organised by the Human Resources Department. Retirement marks the end of a career and the start of a new chapter in life. In all cases, being well-informed and prepared is necessary to cope successfully with this transition.

The programme has been developed for staff members and consists of two seminars:

1. **Leaving CERN** (half day seminar): short presentations by internal speakers, focusing on what options CERN offers at

the end of your career:

- organised once per year,
- next session scheduled on **24 November 2015**, in the afternoon,
- enrolment and more information on: <http://cern.ch/go/K6H9>.

2. **Preparation for retirement** (2-day seminar): interactive workshop (in small groups) delivered by external experts, focusing on how to prepare psychologically as well as practically to cope with all the changes retirement brings:

- organised regularly in **2016**, in English or French,
- enrolment via the CERN training catalogue on: <http://cern.ch/go/>

**mG8Q.** (Please note that the "Sign-Up" button will only be activated as of Monday, 9 November – apologies for this technical inconvenience).

If you are a staff member and considering retirement in the next one or two years, then these seminars are ideally suited for you, and we encourage you to join. Spouses/partners are also welcome – please indicate their participation when you enrol.

For more information, you can contact Erwin Mosselmans, HR-LD, tel. 74125.

Human Resources Department