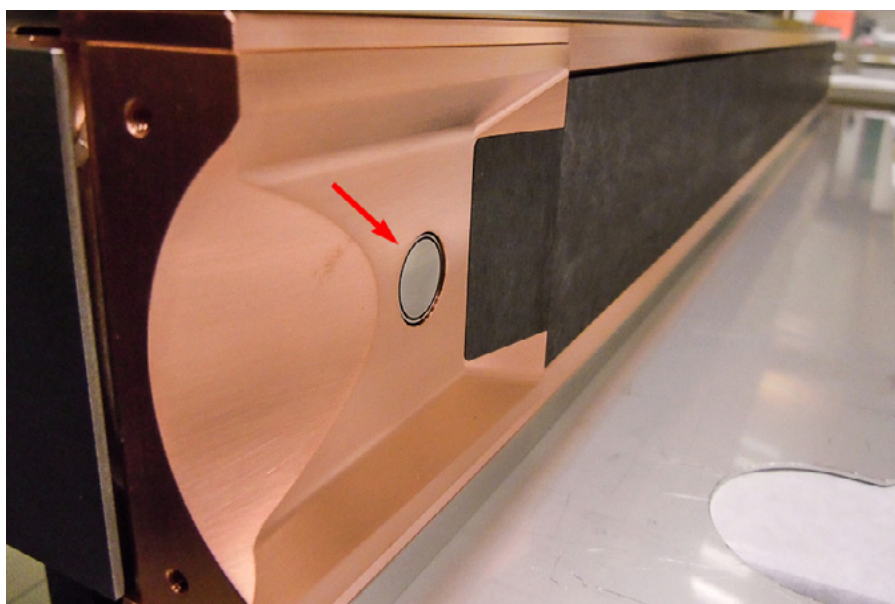


## PRECISION IS IN THEIR NATURE

There are more than 100 of them in the LHC ring and they have a total of about 400 degrees of freedom. Each one has 4 motors and the newest ones have their own beam-monitoring pickups. Their jaws constrain the relativistic, high-energy particles to a very small transverse area and protect the machine aperture. We are speaking about the LHC collimators, those ultra-precise instruments that leave escaping unstable particles no chance.



The internal structure of a new LHC collimator featuring (see red arrow) one of the beam position monitor's pickups.

Designed at CERN but mostly produced by very specialised manufacturers in Europe, the LHC collimators are among the most complex elements of the accelerator. Their job is to control and safely dispose of the halo particles that are produced by unavoidable beam losses from the circulating beam core. "The LHC collimation system has been designed to ensure that beam losses in superconducting magnets remain below quench limits in all operational phases," says Stefano Redaelli from the Beams Department who is Head of the LHC Collimation Project. "In view of the second, high-energy run of the LHC, it was decided to upgrade various aspects of the system. In particular, 18 collimators will be replaced with new ones based on an innovative design."

The collimation system for the LHC Run 2 will consist of a total of 118 devices, distributed in several places around the ring and in the transfer lines but mostly at the warm insertion regions around Points 3 and 7. Collimators are also installed close to the interaction points where beams are optimized for collisions. "By controlling the particle losses, the collimators protect the delicate elements of the machine, help reduce the total dose on the accelerator equipment and optimize the background for the experiments," explains Redaelli.

The beam cleaning requirements at the LHC exceed those of previous machines by several orders of magnitude. In a collider, beam losses are caused by collisions at the interaction points, the interaction of the beam particles with residual gas, intra-beam scattering,



### CELEBRATING DIVERSITY AT CERN

With international women's day coming up on 8 March, along with the recent appointment of a new Diversity Programme Leader, it seems timely to take a look at how far we've come over recent years in promoting gender equality at CERN. In short, the news is good, but we still have some way to travel.

(Continued on page 2)

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## A word from the DG

### CELEBRATING DIVERSITY AT CERN

CERN does not have a policy of positive discrimination, but rather one of presenting a level playing field. We work to ensure, for example, that the diversity of candidates presented for interview reflects the diversity of applicants. It's an approach that is having the desired effect. Overall, the percentage of female staff members has risen from 17% to 20% over the last decade, with parity being achieved among professional administrators and significant advances being made among research and applied physicists, engineers and technicians.

At recruitment, our approach is working: we're managing to attract growing numbers of women. This brings us to the phenomenon known as the leaky pipeline. At CERN, as in other scientific organisations, the average representation of women drops as they progress in their career. Here too, however, we're on the right track. Monitoring of advancement and promotion over the last seven years shows no evidence of gender bias.

And while this has not yet manifested itself significantly in the form of female role models in hierarchical positions, progress to date shows that we're getting there: we're starting to breach the infamous glass ceiling.

Inclusiveness goes beyond gender equality, and CERN has also taken important steps over recent years to provide a diversity-friendly environment. We have created an employment opportunity specifically tailored to the needs of people returning to the work place after a career break. The Staff Association has established an on-site crèche. Our HR Department has introduced training for people serving on selection boards to help ensure fairness. A framework for informal networks has been established. HR has also introduced a series of events to celebrate diversity: the next in this series will take place on 7 March, with a focus on women in science, engineering and technology. All of these initiatives contribute to making a CERN work environment that is based

on principles of mutual respect and inclusiveness.

My own experience in physics leaves me convinced that the best teams to work in are those with the greatest diversity. That's where creativity lies, and that's why I hope you'll join me in celebrating international women's day on 8 March, along with the advances that CERN has made over recent years.

*Rolf Heuer*

## PRECISION IS IN THEIR NATURE

beam instabilities and dynamics changes during the operation cycle (orbit drifts, optics changes, energy ramp, etc.). All these effects may vary over time, depending on various beam and machine parameters. Therefore, the collimation system must be very flexible and highly reliable. "Each ring collimator of the LHC is programmed to follow the changes in energy and optics during the operation cycle of the machine. The collimator aperture is varied according to the requirements, which depend on the specific functionality of each device," says Redaelli. "The jaws can move at a varying pace and can be controlled by the operators, who can also adjust their angle with respect to the beam trajectory. It is a very complex but very effective system, the state-of-the-art for hadron colliders."

In order to decrease the collimator set-up time and to control better the collimator centering around the beam, the newest collimators have been equipped with a dedicated beam monitoring system consisting of 4 pickups, 2 per jaw, located at each motor axis. "This new feature will help us monitor the position of the incoming beam 'live' and with increased precision," explains Redaelli. "The design of the new collimators is the result of a close and

fruitful collaboration between the BE, EN and TE Departments. The first four collimators – two internally produced and two produced in industry – have been accepted and are being prepared for installation." During LS1, the teams will replace 18 collimators, with priority given to those that protect the experiments. Future system upgrades will progressively improve other parts of the machine.

*Antonella Del Rosso*

(Continued from page 1)

(Continued from page 1)

## LS1 REPORT:

### BLOWING AWAY THE COBWEBS

With the pressure tests now complete, we are coming to the equally important phase of cleaning the machine. With all the work performed over the past year, quite a lot of dust and dirt has accumulated in certain areas of the accelerator.



Result of the flushing performed in 2007 in Sector 5-6... This year, in Sector 6-7, the filters were particularly clean.

A simple and efficient solution, known as helium flushing, has been devised by the Cryogenics group (TE-CRG) to clean up these areas. "We circulate helium gas around the machine in both the cryogenic distribution lines and the magnets," explains Gérard Ferlin, who is responsible for the flushing operations. "This blows all the debris into a filter at the outlet."

The flow-rate needs to be high enough to ensure that everything is swept away, so the helium is injected at rates of between 15 and 40 metres per second, much higher than in normal operation. "There's still a chance of leaving some debris behind even so," adds Gérard Ferlin, "but if it's not dislodged by the helium flush it's very unlikely to be dislodged by anything else. This 'floating debris' does remain a concern for us."

Another bugbear is metallic waste such as chippings or brazing residues, which can create short circuits. "These are our greatest enemies," says Ferlin. "They could cause the whole machine to shut down, with massive consequences." So to avoid any problems in the accelerator due to metallic waste, the Cryogenics Group hands over to the TE-MPE team, which is responsible for the electrical quality assurance (ELQA) testing. By measuring the electrical parameters of the machine,

the team can identify non-conformities caused by any metallic residues.

On Monday 24 February, after two weeks of intensive flushing, the Cryogenics Group completed the cleaning of Sector 6-7. "We're very pleased with the state of this sector," says Gérard Ferlin. "The filters were particularly clean and this shows how carefully the teams conducted the repair and consolidation operations." Next on the list is Sector 8-1. If it turns out to be as clean as the previous sector, the teams intend to reduce the flushing time. "That would save us time with respect to the schedule, which would be no bad thing," Gérard concludes.

*Anais Schaeffer*

### Meanwhile, elsewhere



The end of the electrical quality assurance tests is celebrated in the tunnel.

At the LHC, the delays in the SMACC project have been made up and all operations are once again proceeding according to schedule.

The electrical feed boxes (DFBA) at Points 6 and 8 are still being reconnected. The consolidation of the DFBA's in the remaining sectors of the accelerator is also proceeding at a very good pace, and some operations are even a few weeks ahead of schedule.

The electrical quality assurance tests have been carried out in all sectors of the machine. No fewer than 10,000 electrical connections have been tested, which equates to an impressive 100,000 electrical measurements.

In the injectors, the access system is in the process of being re-commissioned. At the PS Booster, the teams are working on the instrumentation for the beam-line and the vacuum. Some of the work currently being performed, such as cable identification and a few civil engineering jobs, is in preparation for the second long shutdown (LS2).



# THE VERY MODEL OF A MODERN PI-MODE STRUCTURE

Linac4's PI-Mode Structures (PIMS) are the first structures of their kind to accelerate protons. Now, over three years after work began on production, over 180 PIMS elements have been rough-machined and the first new PIMS cavity is being assembled at CERN.



The newly assembled PIMS cavity undergoes testing in CERN's Main Workshop

As the final accelerating structures of Linac4, located 53 m to 74 m downstream of the source, the state-of-the-art PIMS cavities will take protons from 100 to 160 MeV. While the first cavity was built entirely at CERN, construction of the remaining cavities has become a larger, multi-national operation. The newest PIMS cavity is being assembled and validated at CERN's Main Workshop. Built in collaboration with the National Centre for Nuclear Research (NCBJ, Poland) and the Jülich Research Centre (Germany), it is the first of its kind to be produced outside the Organization.

Sharing all the required know-how with the external centres proved a demanding task. To ensure the correct construction of these sensitive modules, members of the CERN Workshop and the Linac4 accelerating structure team organised regular meetings in Poland and at CERN to provide support. "In weekly teleconference meetings the progress is reviewed, information is shared and difficulties are solved jointly," says Rolf

Wegner, a member of the Linac4 PIMS team who also developed the cavity's RF design. "Now most of the parts are routinely machined up to the final stage."

The Polish institute NCBJ made impressive progress in order to meet the demanding specifications. As the search for industrial partners for machining in Poland was not successful, only NCBJ was able to develop production methods to reach tolerances as tight as  $\pm 10$  microns over a diameter of 540 mm.

Arriving from Poland part-by-part, it takes around six months to complete and test a PIMS cavity before it can be installed in Linac4. Each cavity consists of seven coupled cells. In order to save copper, cells are formed by welding together eight discs and seven rings, each with a diameter of 0.5 m. Together, these create 15 elements per cavity.

After metrology checks, the 15 elements are stacked up to a complete cavity and the



The electromagnetic field inside the cavity is determined by measuring reflections created by a conducting bead.

## Did you know?

Out of the 32 tonnes of high-quality copper sent to Poland for the PIMS, only around 30% of it will return to CERN as most of the copper is machined off during construction. This "copper usage efficiency" is coincidentally about the same as the PIMS' accelerating efficiency: 27% of the RF input power will be transferred to Linac4's proton beam during operation.

RF parameters are determined. Discs are then re-machined on dedicated sections, so-called "tuning islands", to adjust the frequency. Once the frequency has been checked, all 15 elements are surface-treated for vacuum and joined together by electron beam welding. Then final RF adjustments and vacuum tests are performed before the cavity can be connected and high-power-tested. Collaboration between many different CERN teams is essential in order to complete all these activities.

Katarina Anthony

# LIFTING CERN ENTREPRENEURS TO NEW HEIGHTS

How can an international research institution help employees who wish to leave their comfort zone for the risky endeavour of starting a company? CERN encourages the creation of companies as a way of disseminating technology developed here. But what else can be done to foster these initiatives?

William Rode, a technical student in CERN's Knowledge Transfer Group, studied spin-off creations in some leading research institutions as part of his Master's thesis in entrepreneurship at the Norwegian University of Science and Technology. William, who was offered a ticket to attend the Lift14 conference in Geneva, shares some insight into how we can support entrepreneurship at CERN:

"A while ago I attended the Lift conference in Geneva. The conference explores the business and social implications of technology innovation through talks and workshops, as well as through art and discussion. Innovation is at the core of the conference and is reflected in the open-mindedness of the participants. The culture also very much encourages entrepreneurship. One of the workshops I attended was hosted by AP-Swiss, a company working with the European Space Agency (ESA) to promote the applications of space technology and infrastructure. At this workshop, several start-up companies presented how they had made use of space technology. Like ESA, CERN's Member States have expressed a wish to make CERN's technology available to industry.

So how can CERN support the creation of new companies? During my time at CERN I interviewed the founders of several companies which started in different research institutions to try to answer this question. Through these interviews, one thing became clear: there needs to be someone who is willing to take initiative and commit

themselves to the project. Understanding the motivation of these people willing to entrepreneurially commit themselves may help us to offer better support.

All of the founders I interviewed had been at a crossroads at the time they decided to make the entrepreneurial commitment. Some had recently finished their PhDs, some had seen their limited-duration contract expire and others had waited until retirement before starting the venture. At these crossroads, starting a company is typically one of many routes that can be chosen, and this path is often the most daunting. Trying to start a company is a scary endeavour and it is often psychologically strenuous for an entrepreneur to step into unknown territory. One thing that can help reduce this psychological burden is an institutional culture which is accepting and encouraging of entrepreneurship.

The entrepreneurial culture at CERN is still in its infancy. My impression has been that, depending on the department, expressing a wish to start a company can be met with varying reactions. I believe it is important to further improve this culture, to ensure that a positive impression is given to entrepreneurs at a crossroads. Fortunately, the current entrepreneurship environment at CERN is still developing, and initiatives with potential to further develop the culture are emerging.

We can learn from the culture of the Lift conference by fostering an environment that accepts and encourages entrepreneurship.

This will provide important support for people at a crossroads. Starting a company will always be a risky path to take, and not everyone has the appetite for risk. But an encouraging, supportive culture may help tip budding talent onto the entrepreneurial path."

William Rode

# A NOBEL LAUREATE'S FORMULA FOR THE UNIVERSE

A Nobel laureate and a blackboard at CERN is all you need to explain the fundamental physics of the universe. At least, that's what François Englert convinced us of on his visit to CERN on 21 February 2014. Englert shared the 2013 Nobel prize in Physics with Peter Higgs "for the theoretical discovery of a mechanism that contributes to our understanding of the origin of mass of subatomic particles". In the video accessible from this QR code, he explains how he and Higgs manipulated equations containing mathematical constructs called scalar fields to predict the existence of the Brout-Englert-Higgs field.





# ANOTHER DONATION OF COMPUTER EQUIPMENT

On Thursday 27 February, CERN was pleased to donate computer equipment to a physics institute in the Philippines.



H.E. Leslie J. Baja and Rolf Heuer.

Following donations of computer equipment to institutes in Morocco, Ghana, Bulgaria, Serbia and Egypt, CERN is to send 50 servers and 4 network switches to the National Institute of Physics at the University of the Philippines Diliman.

CERN's Director-General Rolf Heuer and the Ambassador of the Philippines to Switzerland and Lichtenstein, H.E. Leslie J. Baja, spoke of their enthusiasm for the project during an official ceremony.

The equipment will be used for various high energy physics research programmes in the Philippines and for the University's development of digital resources for science.

Anais Schaeffer

## JEAN-MICHEL RAIMOND WINS EPS EDISON-VOLTA PRIZE 2014

**e-EPS News is a monthly addition to the CERN Bulletin line-up, showcasing articles from e-EPS – the European Physical Society newsletter – as part of a collaboration between the two publications.**

The European Physical Society has the pleasure to announce that the 2014 EPS Edison-Volta Prize is awarded to Jean-Michel Raimond for "seminal contribution to physics (that) have paved the way for novel explorations of quantum mechanics and have opened new routes in quantum information processing".

J.-M. Raimond's PhD thesis was supervised by Serge Haroche at the École Normale Supérieure in Paris, France, in the early 1980's, and together S. Haroche, M. Brune and J.-M. Raimond have built an extremely successful research group since then. J.-M. Raimond has made seminal contributions to the development of cavity QED experiments, in particular involving circular Rydberg atoms interacting with very high-Q superconducting cavities. This system has served as test-bed for groundbreaking experiments in exploring entanglement of photons and atoms, or in creating Schrödinger-cat states. One of the group's most spectacular experiments is the detection of a photon in a cavity without

destroying it in the measurement process. In the international scientific community, Jean-Michel Raimond's work is highly considered for its impact on the understanding of the interaction of electromagnetic radiation with matter, as well as for the elegance and beauty of his experimental realizations.

J.-M. Raimond is professor at Pierre-et-Marie-Curie University in Paris since 1988, in addition he was appointed for a ten-year research position at the prestigious Institut Universitaire de France from 2001-2011 (and is an honorary member since then). He has been awarded the Ampere Prize of the French Academy of Science (together with M. Brune), as well as the Gay-Lussac-Humboldt Award by the German Humboldt foundation. He is an enthusiastic teacher and has also served on different positions for the management and organisation of science and higher education.

Martina Knoop, e-EPS News



## Behind the scenes of GS

### EACH TO HIS OWN LOCK AND KEY

**The GS-ASE team in charge of access control has an access solution for every type of premises, from radiation-controlled areas to simple administrative offices.**

Although CERN is unquestionably open to the world, some of its doors must remain closed for a simple reason: as an industrial site, it must put safety and security at the top of its priorities and control access to certain areas in order to protect people and property from hazards.

The AC (Access Control) section of the GS-ASE group uses a range of access control tools as the type of restrictions varies considerably according to the type of premises or area concerned: the requirements at the entrances to the different CERN sites may be quite different, for example, to those at the entrances to a specific building, a storage area, a workshop or an experiment hall within the fenced part of the CERN site.

"We use different types of access systems at CERN", explains Rui Nunes, head of the GS-ASE-AC section. "These range from ordinary doors fitted with a simple key to doors with electronic locks, doors with card readers – often combined with a videosurveillance camera – and doors equipped with dosimeter readers. Of course, we also use special access control systems at the entrance points to the accelerators, such as biometric readers."

The choice of access system depends on various factors, such as the number and type of users, the activities concerned and any hazards, as well as on the degree of restriction required. For example, the new electronic locks that operate with CERN cards are mainly installed in buildings with offices for CERN users. They allow access rights to be managed remotely and to be updated easily in just a few clicks. Dosimeter readers, on the other hand, are essential at the entrances to radiation-controlled areas. They prevent anyone whose radiation dose is too high and whose dosimeter has been invalidated by the Radiation Protection service from entering such areas.

"We operate also various systems to control access to the different sites", adds Nunes. "We've recently supplemented the barriers and number-plate readers at Gate C of the Meyrin site with a new automatic gate. We've also installed a turnstile for cyclists and pedestrians there and plan to do the same near Building 864 on the Préveessin site."

The GS-ASE group works closely with the security guards in managing the comings and goings of the 10,000 people present on the CERN site every day. Their work is facilitated by almost 300 cameras located at



Gate C of the Meyrin site with its new automatic gate and, on the left, the turnstile for cyclists and pedestrians.

strategic points. "While we clearly can't assign someone to monitor each camera around the clock, we can often resolve mysteries by watching the images back", says Nunes. "Once, we even watched an attempted theft live! We can take immediate action in such cases in coordination with the local police forces."

Anais Schaeffer

## Ombuds' Corner

### MARS INTERVIEWS, A TWO-WAY STREET TO MUTUAL UNDERSTANDING (PART 2)

**With the annual MARS exercise approaching, now is an ideal time to consider how to carry out a successful interview. In this issue of the Bulletin, I promised to look at how you, as a supervisee, can use the time to share your specific experience and consolidate an on-going dialogue with your supervisor.**

"The MARS interviews are not a productive use of time." "My supervisee cannot handle any constructive criticism." "I am really nervous about my interview". These are the sorts of complaints heard in the Ombuds

Office and around CERN during this time. But the right approach can turn the experience into much more than a formality. In my last Ombuds Corner, I reminded supervisors of the importance of 'seeking first to understand'

during the MARS interviews they conducted. While this is essential for supervisors, it is also equally relevant for supervisees. Your supervisors are looking for acknowledgement and understanding of their perspectives



- just as you are. Only once this has been accomplished can a true dialogue begin.

The MARS exercise is a two-way process and much depends on the way in which you approach it. Don't go through your appraisal just for the sake of it, but consider what you would like to get out of it for yourself and keep this end in mind throughout the interview. This is a time for you to share your experience with your boss and to make sure your point of view is heard. It is also an opportunity for you to express your interests and agree on future goals together.

Once again, solid preparation is the key – gather together all the relevant information related to your objectives, together with the concrete examples that demonstrate how they were met. If you encountered any difficulties, share them openly so that you can work together with your supervisor to identify ways of overcoming them. Be really clear on what you want to get out of the discussion and don't hesitate to ask for feedback on specific points if they do not come up spontaneously.

The importance of coming to the interview with an open frame of mind cannot be

stressed enough. While it is critical to be prepared with the details of your own experience, you also need to be ready to hear and understand the other person's perspective. Studies have shown that most people do not listen with the intent to understand; they listen with the intent to reply. If you make a genuine effort to understand what you are hearing, you will be in a much stronger position to either defend your work effectively or take on board the feedback in a constructive spirit.

Of course, it is never easy to listen to criticism of your work – particularly when you have put so much effort into it – and you may feel hurt, disappointed or even annoyed. Just take a deep breath and keep your goal in sight – you are there to make the most of this time, so listen to the comments and understand how they can be of use to you. This will help you to remove some emotion from the situation and allow you to evaluate whether the comments may have some merit or require further thought. Remember that your supervisor is there not only to oversee and assess your work but also to provide you with the support that you need to achieve your objectives.

Finally, let us not forget that this is a two-way

process and that this is also an opportunity for you to provide your supervisor with valuable feedback. Here too, preparation plays its part, and the more specific the feedback, the more meaningful it is to receive.

If both you and your supervisor come to the interview well prepared and with a genuine aim to make the most of this exchange, the meeting will progress and become a productive use of your time. So take the time to reflect on what you want to share, and remember that your HRA is there to answer any questions or provide you both with any support you may need in your preparation.

***"Begin with the end in mind [...] listen with the intent to understand, [...] not to reply"***

*Stephen Covey – 7 Habits  
of highly effective people*

*Sudeshna Datta-Cockerill*

## Computer Security

### COMING SOON, A PRAGMATIC DATA PROTECTION POLICY FOR AN OPEN ORGANISATION

Like any other organisation/employer, CERN holds confidential data, e.g. medical records, personnel files, files on harassment cases, NDAs & contracts, credit card information, and even unpublished scientific results. Unfortunately, our current methods of handling such documents are inadequate owing to a lack of clarity with regard to responsibilities and obligations.

So, from time to time, some documents have become public that should not have (such as the premature publication of videos about the 2012 "Higgs" announcement); some of us have accidentally leaked confidential information (such as passwords used to access accelerator and experiment control systems in 2011); other colleagues have lost their laptops or had them stolen (e.g. from a delegation on duty travel in 2013) along with the e-mails and private files saved on them. Fortunately, these times of inadvertent data loss and lack of clarity concerning our obligations should soon be over.

A proposal for the establishment of a CERN-

wide Data Protection Policy (DPP), adapted to the open environment of the Organization was presented at the most recent meeting of the Enlarged Directorate. This policy is intended to establish rules on how to classify data systematically, how to subsequently store and handle it, how to control access to it, and how and when to purge data within the Organization.

The policy will be as holistic as possible and as pragmatic as necessary, and will help CERN to comply with international standards on data protection without diminishing its openness or academic character. There will be a particular focus on rules concerning

confidentiality and the handling of personal data (currently only partly specified in Administrative Circular No. 10). Handling procedures for other data (e.g. those kept by the HSE Department) will be developed in close collaboration with the relevant departments and experiments.

A draft policy has already been prepared by a small working group with members from the GS, HR and IT Departments, the CERN Legal Service and the Computer Security Team. In parallel, this working group is in contact with GS and IT service providers in order to start applying similar data handling guidelines to their computing services to

reach consistency in data classification, storage and protection and to provide adequate storage facilities for each data classification level. This working group will also provide data protection awareness training for key people, suggest quick and easy steps to improve data protection in the DG Unit as well as in the FP and HR Departments, e.g. through the deployment

of uncomplicated disk encryption tools for laptops, assist departments and experiments in reviewing and adapting their internal data handling guidelines in line with the new data protection policy, and help them to establish good practices.

Check out our website for further information, answers to your questions and help, or e-mail **Computer.Security@cern.ch**.

If you want to learn more about computer security incidents and issues at CERN, just follow our **Monthly Report**.

*Computer Security Team*

## Take note

### RADIOGRAPHY AT CERN

**What is industrial radiography?** It is a non-destructive method with a wide variety of applications, such as inspecting the quality of a weld. It uses high-energy radioactive sources or an X-ray generator.

**Is this inspection technique used at CERN?** Yes, it is widely used at CERN by the EN-MME Group, which outsources the work to one or more companies, depending on the workload.

**Is it possible to carry out radiography anywhere at CERN?**

Yes, it is possible to carry out radiography in any building/accelerator/experiment area at CERN (including in areas which are not normally subject to radiological hazards).

**When is radiography carried out?**

It normally takes place outside of working hours (7 p.m. to 6 a.m.).

**How will I know if radiography is taking place in my building?**

If this activity is planned in a CERN building, notices will be affixed to all of its main entrance doors at least 24 hours in advance.

**What are the risks?**

There is a risk of exposure to very high levels of radiation, depending on the configuration of the equipment, how near you are to it and how long you spend in the radiography area.

**Safety warning:**  
**NEVER CROSS markings indicating that radiography is in progress.**

*HSE Unit*

### CERN PSYCHOLOGIST: NEW CONSULTING DAYS

**Please note that the psychologist at the CERN Medical Service can now be consulted, by appointment, on Tuesdays and Fridays from 8.30 a.m. to 5.30 p.m.**

#### CONSULTATIONS WITH THE PSYCHOLOGIST



**Christiane Reis**

Psychologist specialising  
in psychotherapy (FSP -  
member of the Swiss  
Federation of  
Psychologists)



CERN Medical Service - Building 57, 1<sup>st</sup> floor.

Consultations by appointment on Tuesdays & Fridays from 8.30am to 5pm

Direct tel.: 022 767 66 19 ; secretariat: 022 767 84 35/31 86

E-mail: [psychologist-me@cern.ch](mailto:psychologist-me@cern.ch)

Work can sometimes be a source of stress, anxiety, overwork, etc. For this reason, CERN provides a psychologist for the benefit of its personnel. Her role is to prevent, evaluate and address difficult situations, in cooperation with external colleagues if necessary.

The psychologist is available for consultation on any kind of problem – professional or private – in French, English or German.

The quicker the issue is addressed, the easier it is to resolve.

#### EDUCATION

- ☐ Graduate in Psychology
- ☐ 5 years of postgraduate training in cognitive behavioural and interpersonal psychotherapy

**Professional secrecy is key;  
all consultations remain confidential.**

## TAXATION IN FRANCE: PUBLIC MEETING ON WEDNESDAY 19 MARCH 2014

A public meeting will take place on Wednesday 19 March from 1p.m. to 3 p.m. in the Main Auditorium (500/1-001).

At this meeting, Mr Jean-Louis Brandolin and Mr Gérard Polizzi, Head and Deputy Head respectively of the private citizens and companies income tax office at the Public Finance Centre in Bellegarde, will advise members of the CERN personnel domiciled in France on tax-related matters.

The agenda will include questions of principle that appear to be on the minds of many members of the personnel, such as the definition of tax domicile, the content of the income-tax declaration form (reference to CERN income and declaration of other income from a French or non-French source), the declaration of bank accounts outside France and the obligation (under certain conditions) to pay the CSG-CRDS withholding.

**This meeting will only address questions of principle and we expressly invite you not to ask questions on personal matters.**

For all questions on personal matters, such as how to complete the various sections of your tax form according to your personal circumstances, you are kindly asked to refer to the instructions attached to the declaration form or to contact directly the Service des Impôts des Particuliers (office of taxation for private citizens) for your place of residence.

Please note that this meeting will be held in French.

HR Department  
Contact: 73903

## 103ND ACCU MEETING

**DRAFT Agenda for the meeting to be held on Tuesday 11 March 2014 at 9:15 a.m. in Room 60-6-002.**

1. Chairperson's remarks
2. Adoption of the agenda
3. Minutes of the previous meeting
4. News from the CERN Management
5. Report on services from GS Department
6. Progress on Health Insurance for Users
7. Users Office News
8. Matters arising
9. Any Other Business
10. Election of a new ACCU Chairperson
11. Agenda for the next meeting

Anyone wishing to raise any points under "Any Other Business" is invited to send them to the Chairperson in writing or by e-mail.

Michael Hauschild (Secretary)

ACCU is the forum for discussion between the CERN Management and the representatives of CERN Users to review the practical means taken by CERN for the work of Users of the Laboratory. The User Representatives in ACCU are:

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The CERN Management is represented by Rolf Heuer (Director-General), Sergio Bertolucci (Director for Research and Computing), Sigurd Lettow (Director for Administration and General Infrastructure). The Physics Department is represented by Jose Salicio Diez and Doris Chromek-Burckhart (Head of the Users Office), the Human Resources Department by Ingrid Haug, the General Infrastructure Services Department by Reinoud Martens, the Information Technology Department by Mats Moller, the Occupational Health Safety and Environmental protection Unit by Ralf Trant, and the CERN Staff Association by Michel Goossens. ACCU Chairperson: Catherine Vander Velde. ACCU Secretary: Michael Hauschild.

Other members of the CERN personnel attend as necessary for specific agenda items. Anyone interested in further information about ACCU is welcome to contact the appropriate representative, or the Chairperson or Secretary (73564 or ACCU.Secretary@cern.ch).

<http://cern.ch/ph-dep-ACCU/>

## ADMINISTRATIVE CIRCULAR NO. 13 (REV. 3) - GUARANTEES FOR REPRESENTATIVES OF THE PERSONNEL

**Administrative Circular No. 13 (Rev. 3) entitled "Guarantees for representatives of the personnel", approved by the Director-General following discussion at the Standing Concertation Committee meeting of 5 December 2013 and entering into force on 1 January 2014, is available on the intranet site of the Human Resources Department.**

This circular is applicable to all members of the personnel.

It cancels and replaces Administrative Circular No. 13 (Rev. 2) entitled "Guarantees for members of the personnel holding representative office" of November 1992.

The circular was revised in order to adapt the time given to the representatives of the personnel to perform their elective mandate and to ensure more transparency in their activities, by indicating, inter alia, the percentage of time worked in the framework of their mandate, as well as the training, activities and ensuing results.

Department Head Office  
HR Department

## ADMINISTRATIVE CIRCULAR NO. 26 (REV.10) - RECOGNITION OF MERIT

**Administrative Circular No. 26 (Rev. 10) entitled "Recognition of Merit", approved by the Director-General following discussion at the Standing Concertation Committee meeting of 5 December 2013 and entering into force on 1 January 2014, is available on the intranet site of the Human Resources Department.**

This circular is applicable to staff members.

It cancels and replaces Administrative Circular No. 26 (Rev. 9) entitled "Recognition of Merit" of December 2011.

The circular was revised in order to take into account the work performed in the framework of an elective mandate during the exercise of merit recognition of staff members. In addition, the circular was revised to provide that, in the case of staff members on special leave for professional reasons for a period equal to or longer than half a year, it will no longer be possible to grant an exceptional advancement.

Department Head Office  
HR Department

## TAXATION IN SWITZERLAND

**Memorandum concerning the 2013 internal taxation certificate and the 2013 income tax declaration forms issued by the Swiss cantonal tax administrations.**

You are reminded that the Organization levies an internal tax on the financial and family benefits it pays to the members of its personnel (see Chapter V, Section 2 of the Staff Rules and Regulations) and that the members of the personnel are exempt from federal, cantonal and communal taxation on salaries and emoluments paid by CERN.

### I - Annual internal taxation certificate for 2013

The annual certificate of internal taxation for 2013, issued by the Finance, Procurement and Knowledge Transfer Department, will be available on 21 February 2014. **It is intended exclusively for the tax authorities.**

If you are currently a member of the CERN personnel you will receive an e-mail containing a link to your annual certificate, which you can print out if necessary. If you are no longer a member of the CERN personnel or are unable to access your annual certificate as indicated above, you will find information explaining how to obtain one at the following link: [https://cern.ch/admin-eguide/Impots/proc\\_impot\\_attestation\\_interne.asp](https://cern.ch/admin-eguide/Impots/proc_impot_attestation_interne.asp)

In case of difficulty in obtaining your annual certificate, send an e-mail explaining the problem to [service-desk@cern.ch](mailto:service-desk@cern.ch).

### II - 2013 income tax declaration forms issued by the Swiss cantonal tax administrations

The 2013 income tax declaration form must be completed in accordance with the general instructions available at the following address: [https://cern.ch/admin-eguide/Impots/proc\\_impot\\_decl-ch.asp](https://cern.ch/admin-eguide/Impots/proc_impot_decl-ch.asp)

### IF YOU HAVE ANY SPECIFIC QUESTIONS, PLEASE CONTACT YOUR TAX OFFICE DIRECTLY

This information does not concern CERN pensioners, as they are no longer members of the CERN personnel and are therefore subject to the standard national legal provisions relating to taxation.

HR Department  
Tél.: 73903



# Training

## SAFETY TRAINING: PLACES AVAILABLE IN MARCH 2014

There are places available in the forthcoming Safety courses. For updates and registrations, please refer to the Safety Training Catalogue.

March 2014  
(alphabetical order)

**Ergonomics - Worksite and Workshop**  
24-MAR-14, 9.00 – 17.30, in French

**Fire Extinguisher**  
05-MAR-14, 10.30 – 12.00, in French  
12-MAR-14, 8.30 – 10.00, in English  
12-MAR-14, 10.30 – 12.00, in English

**First Aider - Level 1 – Initial**  
27-MAR-14, 8.30 – 17.30, in English

**First Aider – Refresher**  
20-MAR-14, 8.30 – 12.30, in French  
20-MAR-14, 13.30 – 17.30, in French

**Habilitation électrique - Electrician Low Voltage – Initial**  
17-MAR-14 to 19-MAR-14, 9.00 – 17.30, in French  
24-MAR-14 to 26-MAR-14, 9.00 – 17.30, in English

**Habilitation électrique - Electrician Low and High Voltage – Initial**  
18-MAR-14 to 21-MAR-14, 9.00 – 17.30, in English

**Habilitation électrique – Non-electrician – Initial**  
20-MAR-14 to 21-MAR-14, 9.00 – 17.30, in French (1 day and a half)

**Habilitation Electrique - Person making Tests in Labs or on Test-Stands – Initial**  
24-MAR-14 to 26-MAR-14, 9.00 – 17.30, in French

**Mobile Elevated Working Platform - Driving – Initial**  
19-MAR-14 to 20-MAR-14, 8.30 – 17.30, in French (hand-outs in English for non-French-speaking participants)

**Mobile Elevated Working Platform - Driving – Refresher**  
21-MAR-14, 8.30 – 17.30, in French (hand-outs in English for non-French-speaking participants)

**Radiation Protection - Controlled Area - CERN Employees and Associates**  
11-MAR-14, 9.00 – 17.00, in English  
19-MAR-14, 9.00 – 17.00, in English  
24-MAR-14, 9.00 – 17.00, in French  
27-MAR-14, 9.00 – 17.00, in English

**Self-Rescue Mask – Initial**  
03-MAR-14, 10.30 – 12.00, in French  
03-MAR-14, 14.00 – 15.30, in English  
10-MAR-14, 10.30 – 12.00, in French  
10-MAR-14, 14.00 – 15.30, in English  
17-MAR-14, 10.30 – 12.00, in French  
17-MAR-14, 14.00 – 15.30, in English  
24-MAR-14, 10.30 – 12.00, in French  
24-MAR-14, 14.00 – 15.30, in English  
31-MAR-14, 10.30 – 12.00, in French  
31-MAR-14, 14.00 – 15.30, in English

**Self-Rescue Mask – Refresher**  
04-MAR-14, 10.30 – 12.00, in English  
06-MAR-14, 10.30 – 12.00, in English  
11-MAR-14, 10.30 – 12.00, in French  
13-MAR-14, 10.30 – 12.00, in English  
18-MAR-14, 10.30 – 12.00, in French  
20-MAR-14, 10.30 – 12.00, in English  
25-MAR-14, 10.30 – 12.00, in French  
27-MAR-14, 10.30 – 12.00, in English

**Working at Heights - Using a harness**  
18-MAR-14, 9.00 – 17.30, in French  
19-MAR-14, 9.00 – 17.30, in English  
20-MAR-14, 9.00 – 17.30, in English  
26-MAR-14, 9.00 – 17.30, in French

*Safety Training team, HSE Unit*

## NEW COURSE: “INTRODUCTION TO KNOWLEDGE TRANSFER TOOLS”

The Knowledge Transfer group is now offering a half-day course, which will give an introduction to intellectual property, contracts for knowledge transfer, and projects involving industry and other external partners.

The purpose of the course is to give the essential information about how one can secure ownership to inventions and to provide information on legal and contractual considerations when transferring knowledge and technology, or when doing collaborative R&D. The course will also highlight some common pitfalls that should be avoided to increase the chances of successfully transferring knowledge and technology. In addition the course will involve examples of real projects and challenges.

The first session will take place the **19 May 2014**. To enroll, please go to the Training Catalogue under “Introduction to knowledge transfer tools”.

# Seminars

## THURSDAY MARCH 06, 2014

- **14:00** TH Exceptional Seminar **Energy evolution of the moments of the single inclusive hadron distribution in QCD jets** TH Conference Room
- **14:30** ISOLDE Seminar **Shape study of the N=Z and waiting-point nucleus <sup>72</sup>Kr via beta decay** 26-1-022

## FRIDAY MARCH 07, 2014

- **14:00** Particle and Astro-Particle Physics Seminars **TBA** TH Conference Room

## SUNDAY MARCH 09, 2014

- **19:00** HUPP Group - Turkish students meetings **HUPP Top**

## MONDAY MARCH 10, 2014

- **14:00** TH Journal Club on String Theory **Conformality Lost** TH Common Room

## TUESDAY MARCH 11, 2014

- **14:00** TH String Theory Seminar **Renormalization group defects in 2D** TH Conference Room

## WEDNESDAY MARCH 12, 2014

- **11:30** TH Cosmo Coffee **TBA** TH common room
- **14:00** TH Theoretical Seminar **TBA** TH Conference Room