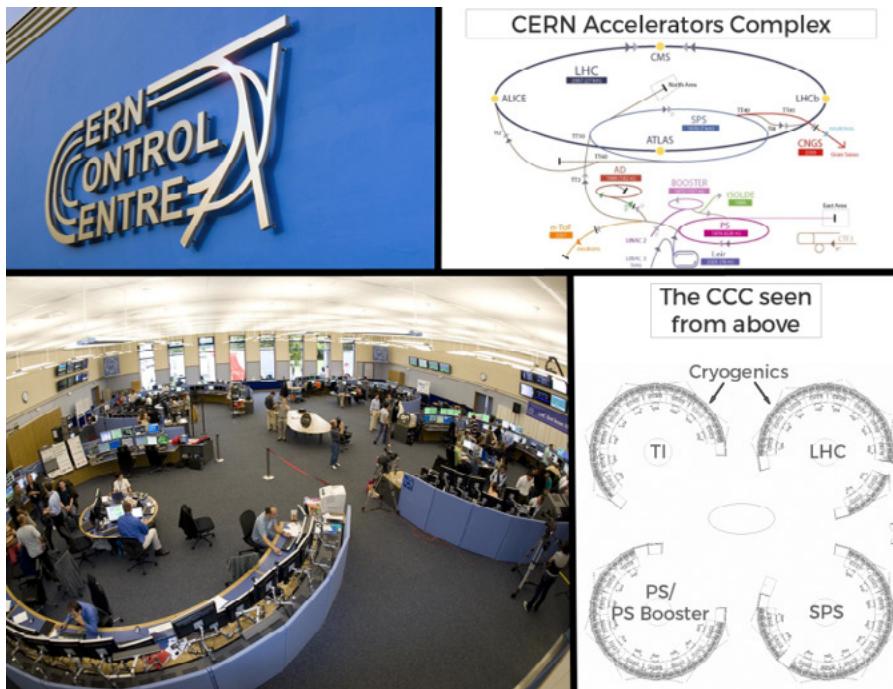


## A DAY IN THE CERN CONTROL CENTRE

The CERN Control Centre (CCC) is the nerve centre of the CERN beam systems. From this room, the experts prepare, monitor, adjust, and control the particle beams that circulate throughout the accelerator complex while ensuring that the services and the technical infrastructure work flawlessly. Buttons, screens, telephones, lights (but no sound): in the CCC, everything is ready to make it possible for the LHC to reach the unprecedented energies expected at Run 2.



Seen from above, the CERN Control Centre resembles the shape of a quadrupole magnet. The consoles are distributed in four circles, called "islands", dedicated to the LHC, the SPS, the PS Complex and the Technical Infrastructure (TI) respectively. Spread between TI and LHC are the Cryogenics consoles. Being in the same room allows the 24h-manned islands to be constantly in touch with one another, thus ensuring the best performance of the machines.

At the LHC island, operators are currently busy training the magnets. For them, the best is yet to come, as with the 6.5-TeV energy, many things are about to change. "We're aware of some of the issues we're going to face, but we expect

the higher energy to bring new issues that will become evident only once the machine is in operation," explains Mirko Pojer, the engineer in charge of the LHC. Among those issues are UFOs: "Unidentified Falling Objects" that could create unwanted particle collisions in the pipes with a potential risk for the machine. "The effect, probably due to dust particles falling through the beam, causes localised beam loss," explains Pojer. "That might trigger the automatic beam extraction that reduces the operational efficiency of the machine." At the moment, the team is performing runs without beams to check all the software, testing the availability of all the systems and doing powering tests for the magnets.



### PROPOSED CUTS TO HORIZON 2020 ARE SHORT-SIGHTED

When the latest incarnation of Europe's framework programme for science funding, Horizon 2020, was announced, it was to great acclaim. Horizon 2020 builds on the already considerable success of its forerunners, which have made international research at the European level a reality and have contributed greatly to European competitiveness on the world stage.

(Continued on page 2)

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# A word from the DG

## PROPOSED CUTS TO HORIZON 2020 ARE SHORT-SIGHTED

We at CERN have benefited considerably, through projects that have enabled us to build on CERN's core competencies to develop science at the grass-roots level across the continent. Horizon 2020 is more ambitious and more streamlined than its predecessors, and, funded at the level of €70 billion over seven years, it is potentially transformative. All of which makes the Commission's plan to raid the Horizon 2020 budget to the tune of €2.7 billion rather incomprehensible.

Keen to stimulate Europe's economies, Commission President Jean-Claude Juncker has proposed a €21 billion

investment plan to cover everything from transport infrastructure to science and education, and this is where Horizon 2020's €2.7 billion is earmarked to go. It's a substantial sum by any measure, but set against Europe's economy, valued at €12 trillion in 2014, it is a drop in the ocean. If the Commission really wants to support European competitiveness, then keeping Horizon 2020 funding intact should, in my opinion, be top of its priority list. However, this does not seem to be the case.

Subject to ratification by the European Parliament, the decision has been taken, and it is now up to the scientific community to ensure that the potential

**negative impact on science is kept to a minimum.**

Over the years, the EU's framework programmes have built many bridges between the scientific communities of Europe. If I had the opportunity to speak to Mr Juncker today, my advice would be not to spend the money on physical bridges. Invest instead on sustaining the intellectual bridges that Europe has painstakingly put in place over the years through the framework programmes. That is the way to European cohesion, competitiveness and prosperity.

Rolf Heuer

## A DAY IN THE CERN CONTROL CENTRE

At the Technical Infrastructure island, one person, for a shift of eight hours, monitors CERN's entire technical infrastructure. "During LS1, each day we have something like two to three thousand alarms going off. With the restart, we expect a smaller number", explains Gildas Langlois, operator from the Beams Department at the TI station. "Nevertheless, when the LHC starts running at never-before attained energies, the pressure on our team will be higher, since, from our point of view, a problem occurring during Run 2 could easily grow faster than during LS1."

The two islands of the injector complex – PS Booster, PS and SPS – have been running at full speed for several months as the injectors were already running last year. The SPS is currently sending argon ions to the North Area, while the PS complex delivered beams to the East Area and the n\_TOF facility in 2014. To coordinate their operations, the SPS, PS and PS Booster operation, equipment and user facility representatives meet every week to discuss the programme for the week, the status of the

machines, or the beam quality. "So far, we are progressing very well towards the expected operation for Run 2," explains Ana Guerrero from the PS section in the Beams Department. "The protons are already circulating in the machines and we don't expect big problems."

While the current in the LHC magnets increases, the fever rises at the SPS island as the injector will soon be preparing the first beams for the LHC. Initially, only the so-called "doublet" – two proton bunches repeated at a spacing of 25 ns – will be injected. "This special beam is used to perform the "scrubbing", a way of cleaning the LHC pipes of surface pollution, which can cause "electron clouds", a phenomenon that can cause beam losses and can be dangerous for cryogenics," says Karel Cornelis of the Beams Department, SPS section.

If the temperature is increasing elsewhere, it's "cold stable" in the Cryogenics team, whose control monitors are distributed over the LHC and TI islands. Indeed, the team is in charge of

making sure that the temperature of the LHC's superconducting magnets is kept as stable as possible at around 1.9 K. "After analysing what happened during Run 1, we improved the software that regulates the temperature," explains Antoine Escoleira of the Cryogenics Operation team. "Only once the machine is in operation will we be able to verify its correct behavior." He adds: "We have enough tools here to intervene via computer if something unexpected happens, but with the restart there will be a little more pressure, since we have to be more than ready to intervene promptly to adjust our machines."

With less than a month to the big event, everything is being prepared to ensure a smooth restart. You can monitor the performance of the whole accelerator complex using the Vistar webtool ([op-webtools.web.cern.ch/op-webtools](http://op-webtools.web.cern.ch/op-webtools)), and, of course, by reading the LHC Reports we publish every other week.

Rosaria Marraffino

## LHC REPORT: REHEARSING THE LHC ACCELERATOR SYSTEMS FOR THE RUN 2 START-UP WITH BEAM

While the commissioning of the superconducting circuits is ongoing, great care is also being taken to make sure that the other key LHC accelerator systems are qualified for beam.

Since spring 2014, small-scale integration tests on the accelerator systems have been scheduled and carried out successfully to exercise them fully and thoroughly debug their multiple interfaces. The LHC Operations team leads this activity in tight collaboration with the equipment experts and the essential

support of the Accelerator Controls group. The tests start once individual system qualification has been performed by the equipment owners and they are ready to be handed over to operations. These tests performed by Operations are called dry runs – dry because they are performed without beam – and they

are carried out from the CERN Control Centre (CCC) using the same high-level software applications that will be used during beam operation.

The dry runs are the first step towards a global integration test that involves all the accelerator systems including the superconducting circuits. In this global test, all systems are driven together through the

(Continued from page 1)

nominal LHC cycle and will be carried out during the machine checkout phase.

For example, the integrated test of the LHC injection kickers, the LHC timing system, the injection protocol and the beam dump system is one of the most important dry runs. First of all, each system is dry run individually, i.e. the Operations team checks that they can be controlled remotely from the CCC with the right configuration. When all the individual tests have been completed successfully, they are tested together: in this particular example, they are exercised together using the operational sequence called "inject and dump".

The test is done without taking beam to the LHC, although the beam is requested by the LHC as the master of the injection protocol. Next, the beam is produced in the pre-accelerator chain, injected into the SPS and finally dumped in the SPS dump. Throughout this process, all the timing events are generated to allow the LHC injection kickers to be pulsed in synchronisation with the SPS beam. In addition, the radiofrequency (RF) systems of the LHC and SPS are automatically synchronised - a crucial condition to make

sure the beam will, eventually, be injected into the requested LHC RF bucket. In parallel, all the relevant beam instrumentation for the injection qualification is triggered and analysed by the Injection Quality Check system. A few microseconds after the "virtual" injection, the beam dump kickers trigger to simulate a programmed dump. If this rather complex exercise is successful, we can claim that there is a good chance that we will be able to inject real beam in the LHC. The "inject and dump" sequence has been tested several times already for both beams, and it was the sequence used during the T12 and T18 transfer line test that took place in November 2014.

Many other tests have been carried out in recent months, addressing other systems like: beam instrumentation; the interface with the LHC experiments; the dedicated magnets for optics, aperture and tune measurements; collimators, etc. Other systems coming up are the Transverse Damper and the RF cavities, which will be soon handed over to operations. Also under way are critical tests concerning the machine protection systems of the LHC.

The LHC is a very complex machine. Dry runs are part of a staged approach towards

beam commissioning that aims to solve problems before the beam arrives, and they are an important part of the overall strategy. Within this staged approach, dry runs and the powering tests of the magnets are two complementary activities that prepare the machine for a successful start-up with beam.

Meanwhile, on the powering test front, four sectors are now fully trained for 6.5-TeV operation with another well into its training program. Important preparatory work has finished in all sectors and the final push is under way to have all magnet circuits for ready for beam commissioning.

Reyes Alemany Fernandez

See the video:  
**Caught on camera**



<https://cds.cern.ch/record/1988413>

## SICK OF QUEUING? THE REGISTRATION SERVICE HAS THE ANSWER

At the beginning of the year, CERN's Registration Service, in its fully renovated premises, launched a new initiative to save you time and to optimise the work of its staff.



One free-to-download application, two ticket printers and three screens: behind this simple-looking system sits an ingenious process

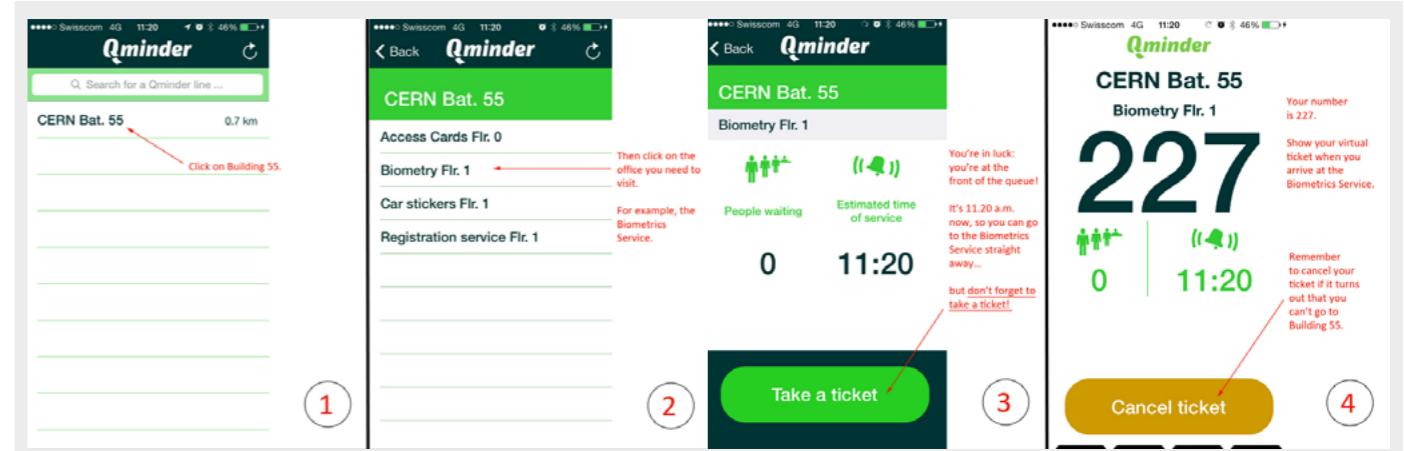
(images below) that will enable you to avoid long waiting times at CERN's Registration Service. The Service delivers some 22 000 badges each year, reaching a peak of 700 per week, and is therefore one of the few places at CERN where queuing is the norm.

But that could all change thanks to Qminder (<http://www.qminderapp.com>), an app that allows users to monitor the waiting times in Building 55 from their smartphones. From today, you can take a virtual ticket using your device and see how long you will have to wait before your case is handled by the next available member of staff.

"The system can also provide statistics on waiting times in the various registration services. That will help us to optimise our resources according to the needs of CERN's employees and contractors," explains Didier Constant, head of the Registration Service.

Try out this new system the next time you need to visit the Biometrics Service, the Access Cards Service or the Registration Service. Thanks to Queuing Theory, a mathematical theory based on the laws of probability that was developed in 1917, it will be no trouble at all to reduce to zero your chances of having to wait more than three seconds (the minimum allowed by the system) to get your documents.

Antonella Del Rosso



# WOMEN AT CERN: ONCE UPON A TIME...

In 1995, a working group was set up to address the gender imbalance at CERN. Twenty years later, the people involved in the endeavour celebrated the long series of achievements recorded by today's Diversity Office.



The working group that submitted a report to the Management with recommendations to increase the number of women working at CERN (1995). From left to right: Maria Fidecaro, Sudeshna Datta-Cockerill, Irene Seis, Eva-Maria Gröniger-Voss, Linda Griffiths.

Back in the early '90s, ahead of a review of the CERN Staff Rules and Regulations, Wim Middelkoop, then Head of the Personnel Division, organised a preparatory meeting to decide which issues should be examined. Eva-Maria Gröniger-Voss, now CERN's Legal Counsel, was the only woman participating in the exercise. She suggested reflecting on the situation of women within the Organization and proposing possible measures to enhance the gender balance at CERN. It was then decided to set up a working group with representatives from the Physics and Personnel Divisions and the Staff Association. "We worked for over a year to draft the report, which highlighted the situation of women and included four types of recommendations to improve it," recalls Eva-Maria.



In 2015, the working group celebrates the achievements of the Diversity policy together with the various people who have been involved in its implementation. From left to right: Maria Fidecaro, Geneviève Guinot, Eva-Maria Gröniger-Voss, Sudeshna Datta-Cockerill, Irene Seis, Josi Schinzel, Doris Chromeck-Burckhart.

The report featured statistics, references to policies in the Member States in this matter, and explicit examples of areas in which women were under-represented at that time. The four conclusive recommendations (see box) were all adopted by the Management over the years and this allowed the Organization to evolve rapidly towards modern standards.

In 1996, Sudeshna Datta-Cockerill was chosen to be CERN's first Equal Opportunities (EO) officer. "At that time," she recalls, "the EO officer was assigned only 20% working time and the focus was very much on the gender question, although from the beginning the programme was designed to be broader." Indeed, 15 years later, in 2011,

Antonella Del Rosso

## Situation in 1995:

14% women/total employees.

Categories requiring university-level education = 5% women/total.

## Situation in 2014:

20% women/total employees.

Categories requiring university-level education = 18% women/total.

## The four recommendations

### Recommendation No. 1:

CERN should formally recognise the principle of equality [of rights and treatment] as part of its personnel policy, which should include an obligation to recruit women, where ability and qualifications are equal, in order to remedy their current under-representation.

### Recommendation No. 2:

the principle of equality should be incorporated into the Staff Rules and Regulations, supported by concrete measures to put the principle into practice.

### Recommendation No. 3:

measures designed to allow a better balance between work and personal life should be implemented: adoption leave, paternity leave, breastfeeding leave, parental leave, leave to care for an unwell child, part-time work and flexible working-time arrangements (the maternity leave is satisfactory).

### Recommendation No. 4:

- the Director-General should appoint an officer responsible for equal rights and treatment;
- a report should be published every two years on the proportion of women working at CERN, broken down by professional category, grade and function;
- women should be appointed to serve on the various committees, commissions and working groups;
- the functions traditionally performed by women should be evaluated;
- new childcare provisions should be created.

She concludes: "Creating an enabling environment for women is key to the success of the whole initiative. We will continue to be very active in carefully monitoring the situation and continuing to make any effort to improve it."

# A NEW DIRECTOR FOR ARTS@CERN

On 2 March 2015, Mónica Bello took the reins of the Arts@CERN programme. A few days before taking over the new job, the curator and art critic talked to the *CERN Bulletin* about her interest in arts and science, her motivations for the job, and her plans for the future of the programme.

"The exciting nature of CERN almost demands an artistic programme like Arts@CERN," says Mónica, former artistic director of VIDA (one of the most important competitions in digital and new media arts worldwide), who has recently been appointed as the new director of the Arts@CERN programme. "The programme is unique as it provides the artist not only with resources, but also with interesting scientific topics and a natural way for the artists to become involved. Thanks to this programme, artists can come to CERN, bring their individuality, and really benefit from the sharing experience with scientists."

Mónica, from Spain, took over her new position on 2 March. An art historian by education, Mónica became interested in the fusion of art and science 10 years ago. "This job is a unique opportunity for me to develop my expertise and to evolve as a professional," says Mónica. "I can contribute to the programme with my understanding of how art and science work together, the processes

involved. But it's also going to be a great learning experience for me due to the unique creative nature of CERN."

Arts@CERN was launched by its former director, Ariane Koek, in 2011, starting with the flagship Collide@CERN artists residency programme and the Visiting Artists programme, which were later followed by Accelerate@CERN, a country-specific one-month research award for artists who have never spent time in a science laboratory before. "Arts@CERN relies on strong cooperation with artists worldwide," comments Mónica. "The vision behind that was really good and I want to pursue that. I also want the programme to be a real presence in the local area, showing artists that CERN can be a resource and a source of inspiration for them. I will also try to expand the Accelerate@CERN international network."

"I like art that is based on open processes, where different agents – the artists,



Mónica Bello.

researchers, even the audience – can join together to become the project. Experimentation with openness is the most exciting thing that's happening in the arts right now – and CERN is the place to be for that," concludes Mónica.

*CERN Bulletin*

# CMS OUTREACH EVENT TO CLOSE LS1

CMS opened its doors to about 700 students from schools near CERN, who visited the detector on 16 and 17 February during the last major CMS outreach event of LS1.



Enthusiastic CMS guides spent a day and a half showing the equally enthusiastic visitors, aged 10 to 18, the beauty of CMS and particle physics. The recently installed

wheelchair lift was called into action and enabled a visitor who arrived on crutches to access the detector cavern unimpeded.

The CMS collaboration had previously devoted a day to school visits after the successful "Neighbourhood Days" in May 2014 and, encouraged by the turnout, decided to extend an invitation to local schools once again. The complement of nearly 40 guides and crowd marshals was aided by a support team that coordinated the transportation of the young guests and received them at Point 5, where a dedicated safety team including first-aiders, security guards, two CERN firefighters and two technicians for the underground lift were present.

The successful event was possible thanks to the support of the CMS Visits Service, Technical Coordination team and Safety team as well as CERN's Local Communication staff. CMS will continue to run underground visits during Run 2, albeit with limited access to the service cavern.

Achintya Rao

# Computer Security

## AN UPDATE ON YOUR PRIVACY – OR LACK OF IT

While we have reported on our privacy concerns when using smartphones or cloud services in past issues of the *Bulletin* (e.g. "Enter the Cloud, pay with your password", "... and thank you for your mobile data!", and "Prison or 'Prism'? Your data in custody"), recent news has once again given us a reason to rant: even after the Snowden revelations, things are not getting better!

Let me start with Microsoft and its initiative to bring the "Outlook" mail client onto Android and iOS smartphones. This app can act as an email inbox for Exchange, Outlook, iCloud, Google and Yahoo mail accounts, just like, for example, the iOS mail client. However, instead of aggregating and storing all emails locally on the smartphone, the user's email and/or calendar data is aggregated on servers operated by Microsoft. For this, the credentials (i.e. passwords) for the corresponding Exchange/iCloud/Gmail/etc. accounts are uploaded to the same Microsoft servers that subsequently fetch all relevant data, emails and calendar entries. Thus, if you use this app to read your CERN emails, your CERN password will already have been transferred to Microsoft. The European Parliament considered this dangerous enough to warrant banning this app from all its devices and forced all its users at that time to change their passwords. Time for you to reconsider using that Outlook app and to change your CERN password...

In this respect, Microsoft is significantly different from Apple's iCloud or Gmail if you synchronise your CERN mailbox with them. Apple iCloud holds an encrypted copy of your CERN password through your iOS back-up, but not a clear text one. Gmail doesn't hold it at all if you just forward the emails sent to your CERN email address to it (but if you are CERN staff, please refrain from doing this as it has implications for CERN's privileges and immunities as an intergovernmental organisation; see "Don't let your mail leak", in *Bulletin* 18-19/2012).

From a different angle, however, Apple has also failed to provide proper privacy (if you believe that this even exists): the Apple mail client provides the capability to block the tracking of emails explicitly, i.e. prevent senders from learning when you've read or looked at their emails. Technically, such tracking is done via a unique token (e.g. an image embedded in your email) being downloaded from the sender's side. Once you look at that email, this download is sufficient to indicate to the

sender that you've seen it. But you're not the only one who could be looking at it: the Apple Spotlight search indexes your emails, and, thus, needs to "look" at them, too. This is where Apple failed: Spotlight triggers the download even if it should be blocked, so the sender at least knows that you've properly received the email...

In short, watch out: protect your privacy and your CERN password. Some apps and programs might gather more information than you expect. Also, keep your emails with the CERN email service and do not forward them to a third-party email provider.

Check out our website <https://security.web.cern.ch>

for further information, answers to your questions and help, or e-mail: [Computer.Security@cern.ch](mailto:Computer.Security@cern.ch)

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

Stefan Lueders, Computer Security Team

## Ombud's Corner

### SPACE INVADERS

When normal communication breaks down and there is no sharing anymore, office-mates can become 'space invaders'. Very often, the situation can be resolved effectively by taking just a few simple steps...

The lack of office space at CERN is a permanent issue that the various departments regularly have to address. As a result, very often this precious space where we spend the entire day has to be shared with other colleagues. Office-mates may come from different backgrounds and cultures and may have very different habits and behaviours; they may also have different activities during the day, sometimes requiring unusual, (perhaps even strange?) interactions with the space they occupy; finally, their presence might be irregular, making it very difficult for us to establish a stable relationship.

Mark and Claire share an office as well as some professional activities. In the beginning, the relationship seems to work normally but, over time, the communication between them steadily degrades and now Mark and Claire find themselves avoiding any interaction with

each other: Mark doesn't even look up when Claire walks into the office and Claire doesn't bother to say "hello". They limit their work communication to the absolute minimum, sometimes even resorting to e-mail rather than talking to each other. The situation becomes unbearable for Claire, who decides to go to the Ombud.

The example above demonstrates a mismatch between two people with different needs and expectations: both find the situation unpleasant but neither of them feels able to speak up and clarify it. In such a case, requesting the support of the Ombud may make it easier for the two people concerned to sit down and find their way out of a situation in which both are stuck.

Indeed, very often we make assumptions about people's intentions and interpret their behaviour to mean something that may not

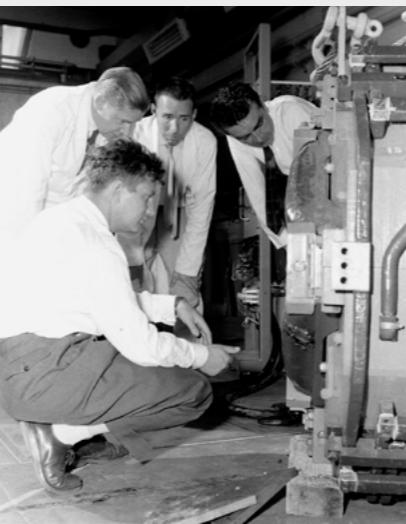
always correspond to reality. By doing this, we find ourselves locked into positions that are very hard to break out of. Things that seem insignificant take on greater significance and start having an influence on the whole working relationship. In the example above, it turned out that the real problem was not one of a lack of consideration after all; it was something quite different and, as soon as it was brought to the surface, the problem was resolved.

Before assuming that your office-mate is insensitive and uncaring because he opens the window even though you are coughing and sneezing, consider sharing your needs with him calmly and openly. Do not wait until sharing the office becomes a daily conflict and you feel that your space is constantly being invaded; instead, take steps to clarify the situation. And if you do not feel able to tackle the question yourself, engage the help of your Ombud.

Sudeshna Datta-Cockerill

## ANSELM CITRON (1923 - 2014)

Anselm Citron, one of CERN's pioneers, an enthusiastic scholar and internationally renowned researcher, passed away on 8 December at the age of 91.



Anselm Citron, front, looks at a quadrupole for the muon beam at the SC with, left to right, Bengt Hedin, Marinus van Gulik and Pierre Lapostolle.

at a technical high school, he took part in the last stages of the Second World War before returning to Freiburg in 1945. There, he studied physics under Wolfgang Gentner, and obtained his PhD.

Citron then joined the Cavendish Laboratory, Cambridge, in 1952, to take part in research on accelerator physics. A year later, he came to the newly founded CERN as one of its first 12 staff physicists and contributed to the construction of the Proton Synchrotron, for which he was responsible for the high-frequency power system and beam shielding. It was then that the decision was taken to construct the hill known as Mont Citron at the end of the PS experimental hall (now the site of Linac 4). After this, he moved to work on CERN's Synchrocyclotron, for which he constructed the first muon channel with strong focusing.

In 1964, Citron was sent to Brookhaven National Laboratory to work in the machine division. Several offers of professorships ensued, and he decided to go to Karlsruhe University in 1965, joining and expanding

the Institut für Experimentelle Kernphysik (IEKP) founded by Herwig Schopper.

At Karlsruhe, Citron's research projects included the development of high-frequency superconducting cavities, which are still being used in contemporary accelerators, as well as the development of electron cooling at the Low Energy Antiproton Ring (LEAR) at CERN. In parallel, he initiated research efforts at CERN and PSI, with noteworthy highlights including: precise measurements with muonic, pionic and antiprotonic atoms; pion-induced reactions with light nuclei at CERN and PSI; meson spectroscopy with antiprotons with the Crystal Barrel experiment at LEAR; and the observation of the  $f_0(1500)$ , a glueball candidate.

We remember Anselm Citron dearly, as a highly esteemed colleague who was greatly appreciated and respected. He was an internationally renowned scientist who paved the way in modern particle-physics research. He also acted as an example for many of his colleagues, particularly in his enduring engagement on behalf of the persecuted.

Helmut Koch, Thomas Müller, Herwig Schopper, IEKP

## KLAUS WINTER (1930 - 2015)

We learned with great sadness that Klaus Winter passed away on 9 February 2015, after a long illness.



Starting in 1976, his work focused on experiments with the SPS neutrino beam. In 1984 he joined Ugo Amaldi to head the CHARM experiment, designed for detailed studies of the neutral current interactions of high-energy neutrinos, which had been discovered in 1973 using the Gargamelle bubble chamber at the PS. The unique feature of the detector was its target calorimeter, which used large Carrara marble plates as an absorber material.

From 1984 to 1991, Klaus headed up the CHARM II Collaboration. The huge detector, which weighed 700 tonnes and was principally a sandwich structure of large glass plates and planes of streamer tubes, was primarily designed to study high-energy neutrino-electron scattering through neutral currents.

Klaus was born in 1930 in Hamburg, where he obtained his diploma in physics in 1955. From 1955 to 1958 he held a scholarship at the Collège de France, where he received his doctorate in nuclear physics under the guidance of Francis Perrin. Klaus joined CERN in 1958, where he first participated in experiments on  $\pi^+$  and  $K^0$  decay properties at the PS, and later became the spokesperson of the CHOV Collaboration at the ISR.

The last experiment under his leadership, from 1991 until his retirement, was CHORUS, which used a hybrid emulsion-electronic detector primarily designed to search for  $v_\mu - v_\tau$  oscillations in the then-favoured region of large mass differences and small mixing angle.

Among other responsibilities, Klaus served for many years as editor of *Physics Letters B* and on the Advisory Committee of the International Conference on Neutrino Physics and Astrophysics. He was also the editor of two renowned books, *Neutrino Physics* (1991 and 2000) and *Neutrino Mass* with Guido Altarelli (2003).

An exceptional researcher, he also lectured physics at the University of Hamburg and – after the reunification of Germany – at the Humboldt University of Berlin, supervising 25 PhD theses and seven *Habilitationen*.

Klaus was an outstanding and successful leader, dedicated to his work, which he pursued with vision and determination. His intellectual horizons were by no means limited to science, extending far into culture and the arts, notably modern painting.

We have lost an exceptional colleague and friend.

His friends and colleagues from CHARM, CHARM II and CHORUS

## TAXATION IN SWITZERLAND

**Memorandum concerning the 2014 internal taxation certificate and the 2014 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 that 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 2014

The annual certificate of internal taxation for 2014, issued by the Finance, Procurement and Knowledge Transfer Department, will be available on 20 February 2015. **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: <http://admin-eguide.web.cern.ch/en/procedure/annual-internal-taxation-certificate>.

If you encounter any difficulties in obtaining your annual certificate, send an e-mail explaining the problem to [service-desk@cern.ch](mailto:service-desk@cern.ch).

### II - 2014 income tax declaration forms issued by the Swiss cantonal tax administrations.

The 2014 income tax declaration form must be completed in accordance with the general instructions available at the following address: <http://admin-eguide.web.cern.ch/en/procedure/income-tax-declaration-switzerland>

**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  
Tel.: 73903

## 107TH ACCU MEETING

Agenda for the meeting to be held on **Tuesday 10 March 2015** at 9:15 a.m. in the Council Chamber (503-1-001):

- Chairperson's remarks
- Adoption of the agenda
- Minutes of the previous meeting
- News from the CERN Management
- Report on services from the GS Department
- Report on services from the IT Department
  - a. Change of the portable phone contract from Sunrise to Swisscom
- Progress on Health Insurance for Users
- Users'Office News
- Reports from ACCU representatives on other Committees
  - a. Scientific Information Policy Board (SIPB)
- Matters arising
- Any Other Business
- 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 to [ACCU.Secretary@cern.ch](mailto:ACCU.Secretary@cern.ch).

*Michael Hauschild (Secretary)*

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

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CERN Management is represented by Rolf Heuer (Director General), Sergio Bertolucci (Director for Research and Computing), Sigurd Lettow (Director for Administration and General Infrastructure). Physics Department is represented by Catherine Decosse and Cecile Granier and by Doris Chromeck-Burkhart (Head of the Users' Office), 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.

Secretary: Michael Hauschild.

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

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

# Take note

## SAFETY DURING MARS EXERCISE

**It is MARS<sup>(1)</sup> time again! All employed members of the CERN personnel are currently undergoing the annual MARS evaluations.**

This is also a good occasion for supervisors and their supervisees to fill in or update the OHS-0-0-3 form<sup>(2)</sup> **"Identification of occupational hazards"**.

Filling in the OHS-0-0-3 form is an opportunity to assess any safety issues related to the supervisee's activities. Each of us should, together with our supervisor, regularly identify and assess the hazards we may be exposed to in the course of our professional activities and reflect on how to control and mitigate them.

When filling in the OHS form for the first time, it is important to determine any potential hazards as well as the corresponding preventive measures, in particular training and protective equipment.

When updating the form, please review the available information to ensure that it still corresponds to the current activities. The form should be updated whenever the activities of the supervisee change. We also recommend keeping an inventory of any safety training courses followed over the past year. Thus the supervisor and the supervisee will be able to identify the most suitable preventive measures and any safety training courses to be followed in the coming year.

Once the necessary safety training has been identified, do not forget to register for the corresponding courses!

For any questions, please contact:

Safety Training: [safety-training@cern.ch](mailto:safety-training@cern.ch)

Safety and working conditions: [hse.secretariat@cern.ch](mailto:hse.secretariat@cern.ch)

Medical aspects and occupational health: [medical.service@cern.ch](mailto:medical.service@cern.ch)

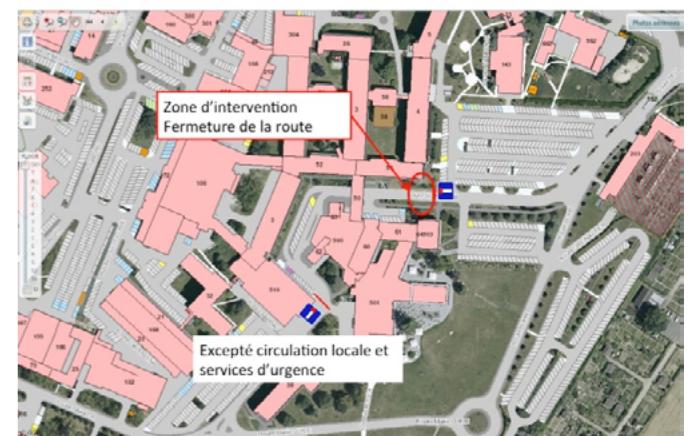
<sup>(1)</sup> Merit Appraisal and Recognition Scheme: <https://admin-eguide.web.cern.ch/procedure/reconnaissance-du-merite-mars>

<sup>(2)</sup> Form available via EDH.

## ROUTE SCHERRER AND ROUTE EINSTEIN CLOSED FOR CONSTRUCTION WORK

Please note that Route Scherrer will be inaccessible for two and a half months from the beginning of March and that part of Route Einstein will be closed for two weeks from the end of February.

### Fermeture de la route Scherrer



The part of Route Scherrer between Building 510 and Building 53 will be closed from the **beginning of March until mid-May for civil engineering works**.

The superheated water pipes supplying the buildings in this area date back to 1959 and therefore present a significant risk of leakage. In order to ensure the reliable supply of superheated water, and, by extension, heating, to all premises near the Main Building (i.e. Buildings 500, 501, 503, 60, 62, 63 and 64), a new buried service duct will be installed between the basements of Buildings 53 and 61 to house a new superheated water pipe.

The following car parks will, however, remain **accessible** for the duration of the works: the Cèdres car park, the car park for Buildings 4 and 5, and the car park situated between Buildings 32, 38 and 168.

### Fermeture de la route Einstein



Route Einstein will also be closed in the vicinity of Building 119 for two weeks from the end of February owing to the installation of a waste water collector beneath the road.

Traffic will be diverted via Route Démocrate.

## THE BULLETIN TURNS 50!

What does the *Bulletin* mean to you? Send us your thoughts!

**WEEKLY BULLETIN**  
**INFORMATION HEBDOMADAIRE**

**Nº 1** Semaine Week 29 Mars 3 Avril  
30-3-65 29 March 3 April

**COLLOQUIA SEMINARS**  
**LECTURE SERIES**

Thursday 1 April 4:30 p.m. Auditorium Seminar "LEPTONIC DECAYS OF HYPERONS"  
H. Pihlström (Lehrstuhl für Hochenergie Physik, Heidelberg)  
(D. Amati / J.C. Senn)  
**REMINDER !**

Friday 2 April 4:30 p.m. Council Room Seminar "HYPERON MISSING MASS EXPERIMENT"  
A. Lundy (A.N. Diddens /  
D.R.O. Morrison)  
**NEW !**

**ACADEMIC TRAINING**

Thursday 1 April 11:00 a.m. Auditorium Theoretical Physics Course "WEAK INTERACTIONS"  
M. Cabibbo and M. Veltman  
**ATTENTION !**  
**C A N C E L L E D**

For affichage For display

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Fifty years ago, on 30 March 1965, the *CERN Bulletin* – or the *Weekly Bulletin* as it was known in those days – was born. It was just a simple newsletter back then, but the *Bulletin* has changed over the years to become a proper magazine bringing together articles on scientific and technical subjects as well as the latest news from the Laboratory and its personnel.

And so, over time, the *CERN Bulletin* has become – the editors would like to think – an icon of the Laboratory, to which the people of CERN are very attached.

If you agree, please send us your comments! Whatever theme you want to highlight – reading habits, anecdotes, scientific discoveries – we'd like to hear what the *Bulletin* means to you. These messages will be published in our anniversary edition on 27 March.

The *CERN Bulletin* team

## Training

### SAFETY TRAINING: PLACES AVAILABLE IN MARCH AND APRIL 2015

There are places available in the forthcoming Safety courses. For updates and registrations, please refer to the Safety Training Catalogue: [cta.cern.ch](http://cta.cern.ch).

Safety Training, HSE Unit  
[safety-training@cern.ch](mailto:safety-training@cern.ch)

## Seminars

### WEDNESDAY MARCH 04, 2015

- 15:00 CLASHEP - CERN Latin-American School of High-Energy Physics 2015 CERN - LATIN-AMERICAN SCHOOL OF HIGH-ENERGY PHYSICS  
20:30 Globe A quelle distance sommes-nous des Lumières ?  
80-1-001

### THURSDAY MARCH 05, 2015

- 14:15 A&T Seminar Feedback and lessons learnt from ALARA Level III interventions in the EN department during LS1 Main Auditorium

### MONDAY MARCH 09, 2015

- 11:00 Academic Training Lecture Regular Programme Big Data Challenges in the Era of Data Deluge (1/2)  
TH Conference Room

### TUESDAY MARCH 10, 2015

- 11:00 Academic Training Lecture Regular Programme Big Data Challenges in the Era of Data Deluge (2/2)  
TH Conference Room

- 11:00 EP Seminar NA62: status and perspectives Main Auditorium

### WEDNESDAY MARCH 11, 2015

- 14:30 ISOLDE Seminar The HIGS proposal and its highlights  
20:30 Globe The long term future of CERN: 100 km collider to see even deeper 80-1-001

### THURSDAY MARCH 12, 2015

- 08:30 Quarterly induction HR INDUCTION PROGRAMME - 2nd Part Council Chamber  
14:15 A&T Seminar Accelerator R&D Towards a New Generation of Accelerators Filtration Plant

### FRIDAY MARCH 13, 2015

- 11:00 Other Seminars A Luz na Física Auditório

### MONDAY MARCH 16, 2015

- 11:00 Academic Training Lecture For Postgraduate Students Science, Innovation & Transfer Technology 4-S-030

### TUESDAY MARCH 17, 2015

- 11:00 LHC Seminar Seminar on ATLAS results Main Auditorium

