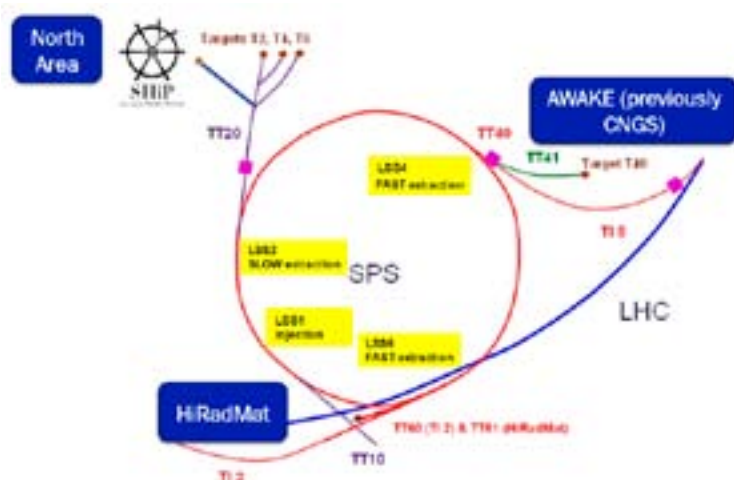


## A SHIP TO EXPLORE NEW ROUTES

SHiP (Search for Hidden Particles) is a proposed new facility for CERN's SPS accelerator. Its challenging goals include a direct search for hidden non-Standard-Model particles. Predicted by a large number of theoretical models, such particles could have slipped under the radar of the LHC experiments because of their specific features. In its first symposium held at CERN on 2 July, SHiP scientists showed the broader scientific community how they plan to unveil the hidden world.



The SHiP experiment is designed to be installed next to the SPS North Area.

Powerful accelerators like the LHC allow physicists to explore extensively the primordial phenomena at energy densities equivalent to those that existed just a few moments after the Big Bang. In this way, thanks to the high precision of the LHC experiments, scientists have been able to comprehensively confirm the predictions of the Standard Model (SM), including the existence of a Higgs boson. However, new physics – particles and phenomena that would explain the observed shortcomings of the SM and would also account for dark matter (which makes up 25% of the Universe) and dark energy (70% of the Universe) – seems to hide in as-yet unexplored regions.

Several theoretical models predict the existence of particles that would interact very weakly with SM particles, would be very rare and would typically have very long lifetimes. These particles, collectively called

“hidden particles”, are the target of the newly proposed SHiP experiment. “A discovery of a very weakly interacting non-SM particle would lead to a dramatic breakthrough in our understanding of particle physics and the Universe,” explains Andrei Golutvin, SHiP Spokesperson. “The SHiP experiment aims to search for such exotic particles, including heavy neutral leptons, dark photons, light scalars, supersymmetric particles and axion-like particles.”

Designed to be installed next to the SPS North Area, the SHiP facility would be housed in a 120 m long and 20 m wide underground hall, which would follow a dedicated 150 m beam extraction line and a target complex on the Prévessin site. The SM particles produced when the protons from the SPS hit the SHiP target would start to interact and decay according to their respective couplings. However, given their very weak coupling,

(Continued on page 2)



### FREEDOM AND SECURITY: A SOMETIMES DELICATE BALANCE

Like any academic institution, CERN celebrates freedom: freedom of expression, freedom of thought and freedom of movement. Occasionally, however, circumstances beyond our control oblige us to impose certain restrictions.

(Continued on page 2)

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# A word from the DG

## FREEDOM AND SECURITY: A SOMETIMES DELICATE BALANCE

Friday, 26 June was just such an occasion. On that day, terrorists chose to commit unfathomable atrocities in France, near Lyon, as well as in Kuwait and Tunisia. The brutality exhibited in all three attacks is beyond comprehension, and I am sure that we all feel for the victims and all those touched by these hideous acts.

At times such as this, and on the basis of information that I receive from external agencies, it is my responsibility as Director-General to decide whether measures are needed at CERN, and to apply them at an

appropriate level if I deem it necessary. On Friday, based on the information I had at my disposal, I decided that the situation merited extra vigilance at the entrances to CERN for the sake of ensuring the safety and security of everyone on site. I therefore chose to reinforce access control.

Many of you experienced this, and the overwhelming majority of you accepted the minor inconvenience it caused with patience and courtesy. However, it has been brought to my attention that there were several incidents of aggressive behaviour

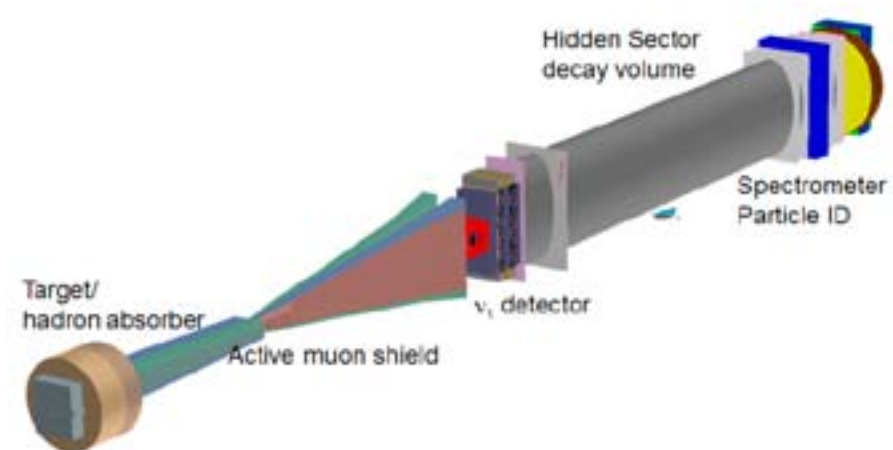
towards the security personnel at the gates. This is unacceptable. It is in breach of this Organization's values and, more formally, it is in breach of our Code of Conduct. As such, any confirmed instances of physical or verbal abuse of security personnel will be dealt with accordingly. After all, another important freedom, in addition to those I've already mentioned, is the freedom to carry out one's professional duties in an atmosphere of respect, free from abuse of any kind.

Rolf Heuer

# A SHIP TO EXPLORE NEW ROUTES

the hidden particles would continue to fly and would reach the SHiP apparatus, where they would decay and produce detectable particles.

The accurate identification of a hidden particle candidate is only possible if the background can be suppressed to an unprecedented level. The target is a key element in the SHiP setup. "In order to minimise the neutrino background, the proposed target is designed using titanium-zirconium doped molybdenum, a material with a short nuclear interaction length and with dimensions that contain the proton shower," explains Richard Jacobsson, who is coordinating the implementation of the detector and the facility. "Secondly, a 50 m long active shield based on magnetic sweeping deflects the muon flux away from the detector decay volume. A large contribution to the background suppression also comes from the slow extraction of the SPS proton beam, which allows us to dilute the 2.6 MW of beam power deposited on the target per spill and to significantly reduce the



Overview of the SHiP facility.

risk of background due to combinations of residual particles forming fake decay vertices."

About 200 scientists from 14 countries worldwide have joined the SHiP effort so far. SHiP is currently under review by the SPS Committee, which will go on into the autumn. This week, the collaboration invited the wider scientific community to discuss the scientific

case in a symposium held at CERN. "We were very encouraged by the discussions raised by the scientists who attended the symposium," says Golutvin. "We are now confidently looking forward to the next phases of the project's feasibility assessment process."

Antonella Del Rosso

# LHC REPORT: OUT OF THE CLOUDS

In order for the LHC to deliver intense proton beams to the experiments, operators have to perform "scrubbing" of the beam pipes. This operation is necessary to reduce the formation of electron clouds, which would generate instabilities in the colliding beams.

Electron clouds are generated in accelerators running with positively charged particles when electrons - produced by the ionisation of residual molecules in the vacuum or by the photoelectric effect from synchrotron radiation - are accelerated by the beam field and hit the surface of the vacuum chamber producing other electrons. This avalanche-like process can result in the formation of clouds of electrons. Electron clouds are detrimental to the beam for a few reasons. First, the electrons impacting the walls desorb molecules and degrade the ultra-high vacuum in the beam chamber. Furthermore, they interact electromagnetically with the beam, leading to the oscillation and expansion of the particle bunches. This increases the probability of quenches in the superconducting magnets and entails a luminosity reduction. Fortunately, when electron cloud production becomes sufficiently intense, after a while, it reduces the probability of creating secondary electrons at the chamber walls and inhibits the avalanche. Running a machine under an intense electron cloud regime is the definition of machine scrubbing.

The scrubbing process in the LHC started gently on Wednesday, 24 June, when the first long trains of bunches spaced 50-nanoseconds (ns) apart were circulated in the LHC. The strong electron cloud initially created caused the first beams injected with this bunch spacing to become unstable and lose particles. Then, however, this electron cloud started "scrubbing" the beam pipes, thus reducing the number of electrons emitted.

This beneficial effect meant that more bunches could then be injected, while the beam stability and quality improved at the same time. Within about 36 hours of the beginning of scrubbing, it was possible to circulate stable trains of 600 bunches in the machine with very limited electron cloud generation and, consequently, without beam degradation.

At this point, the machine experts judged that the scrubbing process could only be efficiently continued by packing bunches closer together. It was therefore decided to fill the LHC with beams of many bunches with 25 ns spacing, which is also the target beam

configuration for luminosity production in Run 2.

While this switch made the beam operation more challenging and all available weapons to stabilise the beams had to be used, the amount of electron clouds produced around the LHC quickly increased and the scrubbing progressed well. It took about four additional days to reach the point of filling the LHC with 1200 bunches in tightly packed trains of bunches separated by 25 ns. The beam stability, initially difficult to handle, also gradually improved as the electron cloud became less dense in all the machine sectors.

The next step consisted of performing a test run with 50 ns spaced beams filling the whole LHC, which was expected to be electron cloud free after the scrubbing period. This was successfully finished this Friday morning (3 July). The machine is now fully validated for 50 ns operation, and very good progress has been made towards 25 ns spacing. However, some work is still needed to prepare the LHC for operation with the full complement of 25 ns spaced bunches later in this year. Another scrubbing run will be performed later in the summer.

Giovanni Rumolo, Giovanni Iadarola and Hannes Bartosik for the LHC team

# HILUMI PREPARES ITS CONSTRUCTION PHASE WITH INDUSTRY

The High-Luminosity LHC project is now seeking industrial suppliers and collaborations to start the construction phase and make the high-luminosity upgrade happen. The "HiLumi LHC goes to Industry" event held on 26 June aimed to foster R&D collaborations and knowledge exchange between CERN and small and medium-sized enterprises (SMEs) - the perfect opportunity for them to match their capacity with the requirements of HiLumi.



Isabel Bejar-Alonso (High-Luminosity LHC Technical Coordinator) addresses the participants of the "HiLumi LHC goes to Industry" event held at IdeaSquare on 26 June.

To reach the 14 TeV and 3000 fb<sup>-1</sup> goal of the High-Luminosity LHC, more than 1.2 km of the current LHC machine will need to be replaced with high-technology components that require cutting-edge technologies. HiLumi experts have already identified more than 65 technology areas and even more challenging components that need to be manufactured, assembled and tested before installation begins during Long Shutdown 2 and Long Shutdown 3.

The aim of the "HiLumi LHC goes to Industry" event held on 26 June was to connect CERN with potential industrial partners that could

deal with the specific technical challenges of the High-Luminosity LHC. "We would like to increase the number of industrial companies working on HiLumi," says Isabel Bejar-Alonso, High-Luminosity LHC Technical Coordinator. "In line with EU efforts, our goal is to foster R&D collaborations and to push knowledge exchange between research institutes and companies to prepare the field for the deployment of the European commercial potential."

Last Friday, leading companies in the fields of superconductivity, cryogenics, power electronics, vacuum and high-precision mechanics met High-Luminosity LHC project engineers at the IdeaSquare premises to explore the technical and commercial challenges emerging from the design and procurement for the upgraded LHC accelerator, and to match them with state-of-the-art industrial solutions. The event attracted more than 140 industrial



representatives from 19 countries (including 17 from Member States), with a great number of them from SMEs. "When CERN was building the LHC, due to the need for big quantities, generally only the largest companies were involved," says Bejar-Alonso. "The smaller ones often did not have the expertise and resources to work with CERN. Now, we encourage SMEs from all our Member and Associated Member States to become suppliers to HiLumi." In

preparation for the event, experts, with the help of the national Industrial Liaison Officers, reached out to all member and associated member states to invite potentially interested companies to the event.

During the event, more than 130 business-to-business meetings took place. "We are incredibly happy to see the large number of companies interested in working with HiLumi.

During the summer, we are going to make available and further distribute the materials presented at the event, in order to reach as many potential suppliers as possible," assures Bejar-Alonso. The project team is already planning to organise a similar event for industrial services – such as civil engineering, etc. – to take place in autumn 2015.

*Agnes Szeberenyi*

## KT GETS EVEN CLOSER TO CERN PEOPLE

**For several years, the Knowledge Transfer (KT) group has been helping CERN people to disseminate their results, know-how and technologies to new fields of application. This may be anything from working with a school, hospital or a company through a licence or collaboration agreement, to securing CERN's intellectual property rights or even starting a company. In order to maximise the impact of CERN's work and to provide a service adapted to its users' needs, the KT group has launched a survey.**

Assessing the needs and wishes of the CERN personnel with regard to knowledge transfer activities: this is the goal of the survey that the KT group has launched this week. "Science and engineering are key disciplines in tackling the fundamental challenges facing the planet, such as energy, security, climate change, the sustainability of natural resources and economic resilience," says Thierry Lagrange, head of the Finance, Procurement and

Knowledge Transfer Department. "CERN has a huge role to play as it generates fundamental knowledge and high-quality training for skilled people who then go on to contribute to business, governments and other organisations across its Member States and beyond."

CERN's potential to develop technology as part of its scientific progress has been

proven and applied in many diverse fields beyond high-energy physics. "With this newly launched survey," explains Lagrange, "we hope to improve further the knowledge transfer process by better understanding the needs of the CERN community. The idea is to start a virtuous circle that ultimately will lead to an increased outflow of CERN knowledge, raising CERN's profile and delivering positive impacts upon society."

You are invited to participate and share your opinions and experiences. It should take no longer than 5 minutes and your feedback is greatly appreciated. The survey will run until 31 July and can be found at: <http://cern.ch/go/8Nwf> (CERN login required).

*KT Group*

### Bearing fruits: the Innogex business incubator welcomes its first companies

Among the tools developed by CERN's Knowledge Transfer group is a network of business incubators that provide logistical, financial and administrative support as well as advice on how to create a company. Innogex, the new business incubator in the Pays de Gex, created in partnership with CERN, has selected its first start-up company: Terabee.

Co-founded by a former CERN employee, Terabee is a company offering aerial inspection and imaging services involving the use of drones.

The company has started to develop distance sensors for robots and drones. Machines equipped with these sensors will be able to carry out automatic inspections of industrial sites. The sensors make use of technology that measures flight time with infrared rays. Infrared technology is cheaper and lighter than lasers and performs better than ultrasound, the two other technologies that are normally used. The sensors were developed in collaboration with CERN and the read-out electronics were based on CERN technology.

*Corinne Pralavorio*

## BEHIND THE SCENES AT MICROCOSM

**Works advance at Microcosm in preparation for a progressive opening of the new exhibitions from mid-July onwards.**



*Construction of the section on the LHC experiments (mid-June 2015).*

The Microcosm exhibition space is undergoing a total revamp and will feature many new objects. Old favourites, such as the LHC tunnel

model and the Linac module, will be brought up to date with more modern exhibition techniques. Another main thrust of the new

exhibitions will be the focus on the people that make CERN work. This is both to show the huge diversity of expertise needed at CERN and also to help students envisage where a career in physics or engineering might take them.

With the project getting the go-ahead last autumn and the closure of the Globe for building works starting from May this year, the new Microcosm exhibition areas will open progressively as and when installations are completed to ensure that summer visitors who haven't booked a guided tour will have something to visit as early as possible. In July and August, a guide will be present in Microcosm to offer additional explanations.

The garden will also open to visitors, with new access gates allowing CERN cardholders to enter directly without passing through Reception.

*Emma Sanders*

## INTERNATIONAL GENEVA: INTELLECTUAL PROPERTY UNDER THE SPOTLIGHT

**On 17 July, the Director-General of the World Intellectual Property Organization (WIPO), Francis Gurry, will present his organisation to CERN people. You are invited to take part and discover the UN's specialised agency for services, policy, information and cooperation relating to intellectual property.**

This is the third in the "International Geneva comes to CERN" series of seminars, which presents other Geneva-based international organisations to CERN's internal audience. In his seminar, Gurry will discuss how WIPO finds the right balance between the interests of innovators and the wider public and how the IP system aims to foster an environment in which creativity and innovation can flourish.

In 2010, CERN and WIPO signed a collaboration agreement designed to strengthen the partnership between the two organisations. The agreement focused

on four main areas for cooperation, namely: capacity building, awareness raising and knowledge sharing; transfer of technology and know-how; cooperation in the area of technological, scientific and patent information; and options for alternative dispute resolution for intellectual-property-related matters. "Indeed, although CERN fosters an open science environment, it is also aware that knowledge transfer and the protection of intellectual property are key to maximising the technological return of fundamental science to society," says Maurizio Bona, who is in charge of CERN's

relations with international organisations. "The two organisations are natural allies in this challenge. This seminar will provide an opportunity for CERN people to get to know the world of patents, copyrights and trademarks better."

The winning formula that was adopted for the first two seminars will also be implemented in this one: a 45-minute presentation followed by 30 minutes of lively discussion with the audience. Put 17 July in your diary: the seminar will be held in the Main Auditorium and will start at 11.00 a.m. Registration is mandatory for people coming from outside CERN: <https://indico.cern.ch/event/396466/>.

*Antonella Del Rosso*



# IT'S ROUND 2 FOR POPSCIENCE

The EU-funded POPScience project welcomed the three poets who are taking part in this year's edition of the popular programme, which will also celebrate Researchers' Night this year. During their four days of training at CERN, the three poets had the chance to meet several scientists and become acquainted with the Laboratory's activity.

During their visit to CERN from 15 to 18 June, Gwyneth Lewis and Susanne Stephan, both members of the "Accademia mondiale della poesia" (World Poetry Academy), and Deborah D'Agostino, representing the International Federation of Business and Professional Women, were introduced by inspiring CERN scientists to a variety of scientific topics – from how LHC magnets work to the fundamental laws of the cosmos, the antimatter mystery and dark matter and energy.

The poets will now work on poems inspired by science, which will be presented on 24

September at 6.30 p.m. at the "Made of shadow and light" event hosted by the University of Geneva in the framework of the 2015 POPScience programme. On that occasion, the Nobel laureate in Literature Gao Xingjian will present his anthology of poems and drawings created specifically for the POPScience project on the topic of "darkness". The event will feature the participation of Sergio Bertolucci, CERN's Director for Research and Computing. You can already book your place to take part. Send an email to [popscience.poetry@cern.ch](mailto:popscience.poetry@cern.ch).

Susanna Wong



Poets Susanne Stephan and Deborah D'Agostino (top image), and Gwyneth Lewis (lower image) visit the CES-SAMag project magnets (SESAME), guided by SESAME's Mohammed Abbeni.

## NEW ARRIVALS

On Thursday, 25 June 2015, recently recruited staff members and fellows participated in an introductory session in the framework of the Induction Programme.



HR Department

## Computer Security

### DO YOU HAVE 30 KCHF POCKET MONEY?

**I am not kidding. Do you have 30,000 CHF to spare? Give it to me, so that I can lose it. It won't even be well invested. We will just give it away by mistake. An easy mistake, some think. A "gentlemen's" blunder. Unimportant and, really, not at all a big deal. But, of course, that's wrong - and expensive. Here is my story.**

Recently, a student working at CERN was supposed to make a sophisticated simulation of thermal conductivity within a metallic structure, the resulting mechanic stress and the electromagnetic field variations within it. All of his teammates were using a commercial simulation package named - for the sake of brevity - "AIIISIM". But our student failed to download AIIISIM from DFS onto his office PC, since that wasn't where he wanted to use it. He wanted to install it on his laptop so that he could work on his simulation while travelling. However, the CERN AIIISIM installation would not allow for this, as roaming usage is not covered by CERN's AIIISIM licence. The student had a need and was not willing to compromise i.e. by using the Windows Terminal Service. Instead, he used Google and quickly found AIIISIM for free on a dubious website. Three clicks later, he was ready to go.

Enter the 30 kCHF. AIIISIM permanently monitors the usage of its software and is able to identify installations with invalid

licence keys. Hence, we, the CERN Computer Security Team, received an e-mail accusing CERN of running their software with a pirated licence – despite the fact that CERN possesses a pool of licences to cover all its needs. Their request: stop the illegal activity immediately, buy official licences from them and make an indemnity payment for "licence infringements". The price tag, as you might have guessed, was 30 kCHF.

Understandably, the student was shocked when we investigated the case and he was forced to acknowledge the facts. The AIIISIM licence was pirated and the student had violated CERN's Computing Rules just for the sake of convenience. As he was affiliated with a university, CERN passed all costs to them who, in turn, passed them on to the student. So, do you have 30 kCHF to spare?

Through simple ignorance of the CERN Computing Rules, violating proprietary rights and licence conditions, downloading

pirated software, and committing copyright infringement, the student has not only placed the Organization's reputation at risk, but also created a financial liability for CERN, his university and – in the end – himself. So unless you have 30 kCHF to throw away, don't forget that software vendors make a living by charging for their products. CERN offers a variety of commercial software and has all the corresponding licences you'll need for your professional use. If you can't find what you need, please get in touch with the CERN Software Licence Officer, Helge Meinhard (IT/PES).

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



## "SUMMERTIME – AND THE LIVING IS EASY..."

Summer is the time when everybody feels more relaxed and, while we continue to work hard, we also take the time to pause and get to know our colleagues better. This is a very natural and effective way to re-energise. However, let's not forget that we remain 'Cernese' at all times, and that CERN values continue to guide our interactions even at this time, whether we are at work or enjoying a well-earned break.

Summer at CERN is a wonderful time: instead of just emptying for holidays, the Laboratory welcomes a lot of young – and not so young – people from all over the world. The pleasant weather invites people to gather on the lawns or other common areas to have a drink or meal together. The hostel doesn't take a break, nor do the restaurants and all these popular gathering places are usually buzzing with people at all hours of the day and well into the night.

As important as these times are for networking and building worldwide contacts within the scientific community, they are also times for us to discover different cultures and learn about how other people work and interact with each other.

Indeed, as these are times when many people come and go, spending short periods of time

at CERN, we need to be particularly aware of our different backgrounds, sensitive to the impact that our actions have on one another, and not let a more relaxed atmosphere allow us to fall into inappropriate behaviours, as has unfortunately been known to happen on occasion. If this should happen, however, and if you find yourself subjected to any kind of sexist remarks or bullying or intimidating behaviour, do not hesitate to recall the CERN values, ask a colleague for support in doing so if necessary or seek assistance from your Ombud.

This awareness is particularly relevant when it comes to interacting across the various diversity fronts, keeping in mind aspects such as the fact that some cultures have a more direct communication style than others, avoiding off-colour jokes of a sexist or nationality-based nature, taking the time

to understand each other's perspectives, ensuring that minority groups or individuals are included in our interactions in a respectful and sensitive manner and yes, just generally remembering that the CERN Code of Conduct applies to us all regardless of the time of the year or the type of activity in which we are engaged.

Whether we plan to stay in this Organization for only a few weeks over the summer or we expect to be here for many years, our interactions with our colleagues will always play a rich and vital part in our CERN experience and memories – let us all work together to ensure that this remains a positive time for all, long- or short-term colleagues alike!

### Contact the Ombud Early!

All previous Ombud's Corners can be accessed in the Ombud's blog: <http://cern.ch/go/P8Dm>

Sudeshna Datta-Cockerill

## Take note

### GOING ON HOLIDAY? TRAVELLING ON DUTY? DO YOU KNOW WHAT TO DO IF YOUR MOBILE PHONE IS LOST OR STOLEN?

It's summertime and many of us will be going on holiday, perhaps far away from Geneva. Duty travel also takes many of us far away from CERN from time to time. You probably know how to cancel your credit cards if they are lost or stolen, but do you know how to block your CERN mobile phone from use?

Recently, one user waited until returning to CERN to block theirs which was enough time for the thief to run up a substantial phone bill. Please make sure the same doesn't happen to you!

If your phone is lost or stolen:

a) **during working hours:** call the Telecom Lab on +41 22 767 2480 or the CERN Switchboard on +41 22 767 6111 **as soon as**

**possible** and provide:

- your telephone number,
- your name / first name / department.

b) **outside working hours:** call the Swisscom hotline **as soon as possible** on:

- +41 800 55 64 64 (in Switzerland) or,
- +41 62 286 12 12 (outside Switzerland).

You will also need to report the loss or theft in accordance with CERN's official procedure, which means you at least need to make a report to the local authorities and then complete the declaration of loss or theft form.

Please note that you must follow these steps even if you are using your own mobile phone. The loss of the SIM card exposes CERN (and you if you have a private subscription) to financial loss if the subscription is abused.

This information, as ever, can be found on the CERN mobile phone website: <http://cern.ch/go/b8xM>, where there is a dedicated information page for loss and theft.

### WORK ON THE BUILDING 4 CAR PARK AND CLOSURE OF ENTRANCE A

From 6 July to 31 October 2015, the GS department will be carrying out renovation work on the car park next to Buildings 4 and 5. This work is aimed at improving safety on and around the car park for all users, particularly children attending the nursery school, pedestrians and cyclists.

The work on the car park will be conducted in two stages so that half of the parking spaces will always be available, in order to limit the impact on users as much as possible (the closed-off areas will be clearly indicated). When the work is completed, the car park will have been completely renovated, with new surfacing and road markings, high-quality lighting and more parking spaces (+5%).

During the work, part of the car park will be inaccessible, which is likely to make it more difficult to find a parking space. We therefore invite you to park in the Globe car park during this period.

The renovation work will also affect Entrance A (Route Bell), which will be fitted with a fully automated road gate, similar to the one at Entrance C. For increased convenience and safety, two turnstiles for access by pedestrians and cyclists will also be installed. Entrance A will also be closed from 6 July but should be operational again by the end of September.

We thank you for your understanding and apologise for any inconvenience.

GS Department

### ANNOUNCEMENT BY THE INTERNAL TRANSPORT SERVICE

The Shipping Service requests all users of wooden pallets, freight containers and lids that are no longer in use to contact the Internal Transport Service of the GS department (George Truelove), which is responsible for collecting and returning them to the Goods Reception Service in Buildings 904 and 194.

Please also contact Mr. Truelove if you receive an order that is not meant for you.

Internal Transport Service

### DOING BUSINESS WITH CERN

The Procurement Service, in collaboration with the Communications group's Design team, has recently launched a new information campaign targeted at companies wishing to supply their products and services to CERN. This campaign comprises:

- A brochure, available in hard and soft copy: [http://issuu.com/cern-kt/docs/cern\\_doingbusiness](http://issuu.com/cern-kt/docs/cern_doingbusiness).

- A 6-minute video overview: <https://procurement-dev.web.cern.ch/doing-business-with-cern>.

This campaign is intended for Member State firms with whom CERN is yet to do business. The key objectives are:

- To emphasise that CERN can be considered a major customer across a wide range of activities;
- To present CERN's procurement procedures in a dynamic and digestible way;

- To highlight the information available on CERN's procurement website: <http://procurement.web.cern.ch>.

Furthermore, a new section called "Having a contract with CERN" is also now available. This section is designed for companies wishing to know more about: CERN's values, the General Conditions of CERN Contracts, transport and delivery, invoicing, working on the CERN site and the use of the CERN logo, etc.

Developing a coherent message across a variety of media required the development of a clear visual identity incorporating CERN's values. To achieve this, the Communications group's Design team worked to put this identity into place using images of CERN buildings, the experiments and particle animations to root the campaign's message in some of the Laboratory's iconic elements. As the animation contains a large amount of information, a clean and modern style was selected.

Watch the video:



<https://cds.cern.ch/record/2030136>

### SUMMER RESTAURANT OPENING TIMES

**Restaurant No. 1:** Open as usual in July and August. Open from 7 a.m. to 10 p.m. on Thursday, 10 September (*Jeûne genevois*).

**Restaurant No. 2:** Open as usual in July and August. Closed on Thursday, 10 September (*Jeûne genevois*) and Friday, 11 September. The Brasserie (table service) will be closed from Monday, 4 August to Friday, 11 September.

**Restaurant No. 3:** Open as usual in July and August, but closed on Saturday, 1 August; Saturday, 15 August; Thursday, 10 September (*Jeûne genevois*); and Friday, 11 September.

**Snack bar in Building 54:** Closed from Monday, 4 August to Friday, 11 September.

**Snack bars in Buildings 13, 30 and 6:** Closed on Thursday, 10 September (*Jeûne genevois*) and Friday, 11 September.

### PUBLIC LECTURE COLLIDE@CERN PRO HELVETIA | 23 JULY - 7 P.M. | MAIN AUDITORIUM

You are very warmly invited to the opening presentation of *Fragment. In's* residency at CERN.



Simon de Diesbach, Laura Perrenoud and Marc Dubois.

23 July 2015 - 7 p.m.  
Main Auditorium

The lecture will be followed by a drinks reception at 8.30 p.m. Doors open at 6.30 p.m.

*Fragment.In* are the winners of Collide@CERN Pro Helvetia, formed by Laura Perrenoud, Simon de Diesbach, and Marc Dubois. They will present their artistic work along with their CERN scientific inspiration partner, who will present his/her work on science. In their proposal, *Fragment.In* has a unique, original and creative approach to data visualization. We look forward to having them at CERN.

Collide@CERN is the three month residency programme providing artists with time and space to reflect, research and renew their artistic practice. The lecture is open and is free to the public and you are very welcome to bring guests and friends.

Any questions please contact Julian Calo, Coordinator of Arts@CERN ([julian.calo@cern.ch](mailto:julian.calo@cern.ch)).

We very much look forward to welcoming you.

Get your free ticket at: <http://cern.ch/go/rW9v>.  
More information at: <http://cern.ch/go/qj8m>.

Arts@CERN

## Training

### COMING SOON - LAUNCH OF E-LEARNING INITIATIVE FOR SUPERVISORS

In early July, the Learning and Development group is launching a new learning initiative specifically targeted at supervisors here at CERN. With the assistance of experts on the subject, we have designed an exclusive series of five e-learning modules. These modules will help supervisors to synthesise some of the important processes that influence and impact their daily work and build key competencies as people managers.

Each module may take up to a maximum of 60 minutes to complete and covers the following topics:

- CERN as an Organisation
- People Management (Part 1)

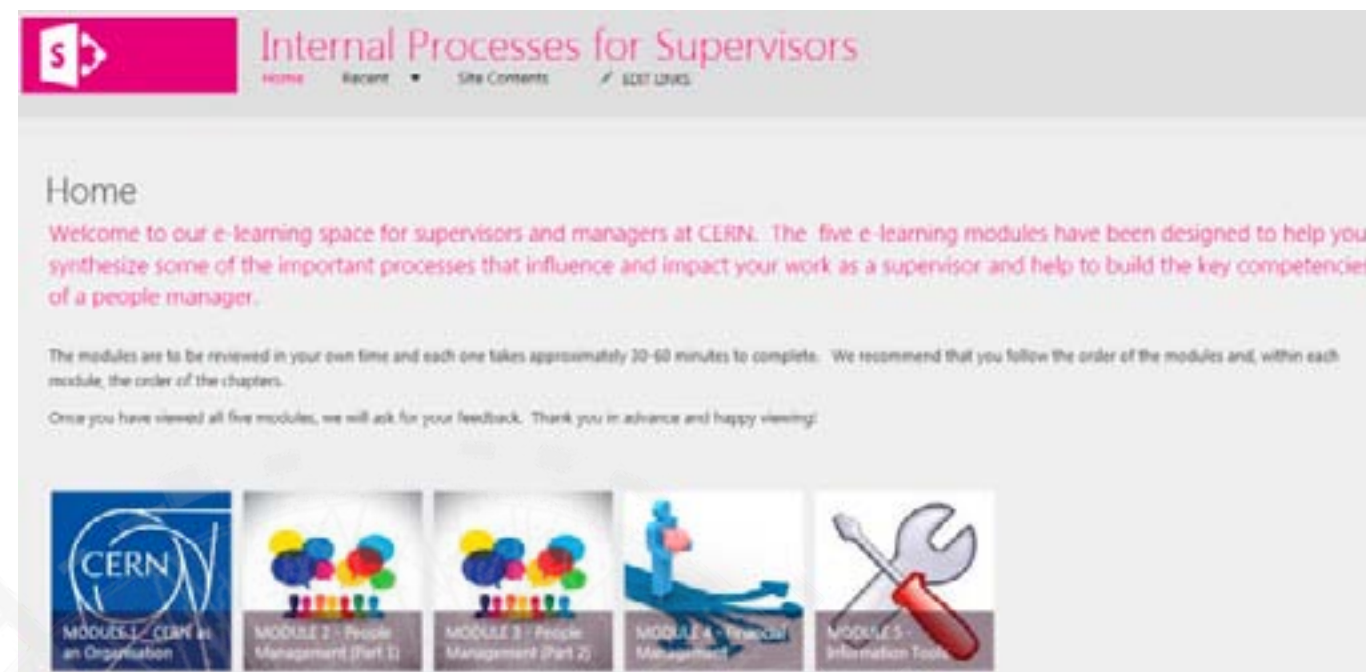
- People Management (Part 2)
- Financial Management
- Administrative Information Tools for Supervisors

Supervisors will receive an invitation from the L&D group to access the modules on a dedicated e-learning space created on SharePoint.

We recommend that all newly appointed supervisors access and complete the five modules **within the first month** of taking up their supervisory role.

For more information, please contact your HRA, your DTO or the Learning and Development group.

*Learning and Development group*



## Seminars

### FRIDAY JULY 10, 2015

- 09:15 Summer Student Lecture Programme Course **Introduction to Statistics (4/4)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Nuclear Physics at Isolde (3/3)** Main Auditorium
- 11:00 Detector Seminar **New TOTEM Roman Pot timing detectors** Salle Anderson
- 11:15 Summer Student Lecture Programme Course **Detectors (2/5)** Main Auditorium

### MONDAY JULY 13, 2015

- 09:15 Summer Student Lecture Programme Course **Electronics, DAQ & Trigger (1/3)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Detectors (3/5)** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **Electronics, DAQ & Trigger (2/3)** Main Auditorium

### TUESDAY JULY 14, 2015

- 09:15 Summer Student Lecture Programme Course **Flavour Physics and CP Violation (1/4)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Detectors (4/5)** Main Auditorium
- 11:00 LHC Seminar Seminar on **ALICE results** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **Electronics, DAQ & Trigger (3/3)** Main Auditorium

### WEDNESDAY JULY 15, 2015

- 09:15 Summer Student Lecture Programme Course **Flavour Physics and CP Violation (2/4)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Detectors (5/5)** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **Neutrino Physics (1/3)** Main Auditorium

### THURSDAY JULY 16, 2015

- 09:15 Summer Student Lecture Programme Course **Triggers for LHC Physics** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Flavour Physics and CP Violation (3/4)** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **Neutrino Physics (2/3)** Main Auditorium

### FRIDAY JULY 17, 2015

- 09:15 Summer Student Lecture Programme Course **Neutrino Physics (3/3)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **Flavour Physics and CP Violation (4/4)** Main Auditorium
- 11:00 International Geneva **WIPO Director-General introduces WIPO to the CERN internal audience** Council Chamber
- 11:15 Summer Student Lecture Programme Course **From Raw Data to Physics Results (1/3)** Main Auditorium

### SATURDAY JULY 18, 2015

- 09:30 APPEAL - University of Oxford **Accelerator and Particle Physics Education at A-Level - APPEAL 6**

### SUNDAY JULY 19, 2015

- 08:00 HASCO Summer School **HASCO Summer School 2015 HS5**

### MONDAY JULY 20, 2015

- 09:15 Summer Student Lecture Programme Course **Beyond the Standard Model (1/5)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **SM Physics at Had. Colliders (1/3)** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **From Raw Data to Physics Results (2/3)** Main Auditorium

### TUESDAY JULY 21, 2015

- 09:15 Summer Student Lecture Programme Course **Beyond the Standard Model (2/5)** Main Auditorium
- 10:15 Summer Student Lecture Programme Course **SM Physics at Had. Colliders (2/3)** Main Auditorium
- 11:00 LHC Seminar Seminar on **CMS results** Main Auditorium
- 11:15 Summer Student Lecture Programme Course **From Raw Data to Physics Results (3/3)** Main Auditorium



