

CALET: A STOPOVER AT CERN BEFORE FLYING TO SPACE

CALET is an electron telescope that will be flying to the ISS this year. Calibration tests are currently being completed on a replica of the instrument at CERN's H8 beam line. The final payload will then be transported on board a Japanese transfer vehicle and docked on the JEM-EF platform to take data and explore the high-energy cosmos.

© JAXA/IA



The CALET calorimeter is preparing for installation in the flight module that will bring it to its final destination on the ISS.

The CALorimetric Electron Telescope (CALET) is a detector designed by a Japanese-led international collaboration to identify cosmic electrons, nuclei and gamma-rays and to provide high-resolution measurements of their energy. Using two calorimetric instruments and a particle identification system, CALET will perform high-precision measurements of the electron energy spectrum from 1 GeV to 20 TeV. "By detecting electrons with an energy above 1 TeV, CALET might be able to identify the astronomical sources from which they originate," explains Shoji Torii of Waseda University in Tokyo, Principal Investigator of CALET. "There are currently many candidates but there is no experimental confirmation yet."

The energy spectrum of the high-energy electrons could also reveal signatures of dark matter. "According to several dark matter theoretical models, the shape of the spectrum could be linked to the nature of dark matter," confirms Pier Simone Marrocchesi, co-Principal Investigator of the CALET collaboration and head of the Italian team involved in the experiment. "Thanks to CALET's excellent energy resolution and ability to distinguish between hadrons and electrons, and between charged particles and gamma rays, we are confident that CALET will contribute to shed light on these outstanding questions."

CALET builds on the important data coming from other space-based experiments,

(Continued on page 2)



KEEPING HL-LHC ACCOUNTABLE

This week saw the cost and schedule of the High Luminosity LHC (HL-LHC) and LHC Injectors Upgrade (LIU) projects come under close scrutiny from the external review committee set up for the purpose.

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A word from the DG

KEEPING HL-LHC ACCOUNTABLE

HL-LHC, whose implementation requires an upgrade to the CERN injector complex, responds directly to one of the key recommendations of the updated European Strategy for Particle Physics, which urges CERN to prepare for a ‘major luminosity upgrade’, a recommendation that is also perfectly in line with the P5 report on the US strategy for the field.

Responding to this recommendation, CERN set up the HL-LHC project in 2013, partially supported by FP7 funding through the HiLumi LHC Design Study (2011-2015), and coordinated with the American LARP project, which oversees the US contribution to the upgrade. A key element of HL-LHC planning is a mechanism for receiving independent

expert advice on all aspects of the project. To this end, several technical reviews have been conducted over the last two years, while this week it was the turn of the cost and schedule to come under scrutiny.

The review committee consists of the CERN Machine Advisory Committee (CMAC), supplemented by five additional members from laboratories and universities around the world with expertise in domains specifically related to the main HL-LHC technologies. Their brief is to ensure that cost estimates are realistic and achievable, and, equally importantly, to cast a critical eye over the proposed schedule, allowing us to focus on critical path items, and make adjustments if necessary.

The committee has given the project a clean bill of health, along with issuing a number of recommendations that the project management will now digest and factor into CERN’s medium-term plan to be presented to the Council in June. HL-LHC is a key part of CERN’s medium-term strategy, designed to ensure that the global particle physics community is able to exploit the full potential of the LHC. Ensuring that its ambitions are technically and financially realistic and planned to an achievable schedule is all part of good governance, keeping the project accountable to funding agencies and physicists alike.

Rolf Heuer

CALET: A STOPOVER AT CERN BEFORE FLYING TO SPACE

including Fermi, PAMELA, AMS, balloon instruments and ground-based Atmospheric Cherenkov Telescopes (ACT). Since its uniqueness resides in its ability to measure the energy of impinging cosmic particles, the energy calibration of the two calorimetric instruments is the key to the whole experiment. This is why calibration tests are being performed on a replica of CALET – basically, this is the same instrument except for some flight related control systems –

installed at the H8 SPS beam line in the North Area at CERN’s Prévessin site. “CERN offers us a unique opportunity to use high-energy beams of relativistic ions,” says Marrocchesi. “Even if the maximum beam energy during the current test at CERN is limited to 150 GeV/n for elements from deuterium to argon while once in space we want to detect higher-energy particles, these measurements will provide us with the necessary information on how our detector works.”

After the calibration tests, the focus will move to Japan where the Japanese Aero-Space Agency (JAXA) is finalising the preparation of the H-II transfer vehicle (HTV) that will fly CALET to the ISS. A robotic arm on the ISS will then position the instrument on the external platform of the Japanese module (KIBO). CALET is expected to take data for about five years.

Antonella Del Rosso

LHC REPORT: THE BEAM IS BACK AT THE LHC

A series of sector beam tests paved the way for the start-up of the LHC in 2008 and 2009. These tests and the follow-up of the issues that arose were part of the process that led to a smooth start-up with beam.

Given this experience, sector tests were scheduled to take place several weeks before the 2015 start-up. On the weekend of 6-9 March, beam from the SPS was injected into both LHC injection regions, followed by a first pass through the downstream LHC sectors. For the clockwise LHC beam (called “beam 1”) this meant passing through ALICE and into Sector 2-3, while the anticlockwise beam (called “beam 2”) was threaded through LHCb and all the way from Point 8 to Point 6, where it was extracted by the beam dump kickers onto the beam dump block.

The dry runs in the previous weeks were mainly targeted at preparation for the sector tests. The systems tested included:

injection, timing, synchronisation and beam instrumentation. The beam interlock system was switched to a special configuration for the sector tests to allow arming and firing of the beam dump kickers, while still monitoring other critical systems. A low intensity beam was used, i.e. single bunches with a “probe” bunch population of 5×10^9 protons – compared with 1.15×10^{11} protons in one nominal bunch.

On Thursday, one day before the sector test, the final global LHC Departmental Safety Officer (DSO) tests took place. This series of tests ensures the proper functioning of all systems related to the protection of personnel. The access system is obviously

heavily involved, along with a number of magnet circuits that can only be powered if the machine is in closed mode and ready for beam. Only with all the required signatures in place following the DSO tests could beam be injected into the LHC.

On the afternoon of Friday, 6 March, beam 1 and beam 2 were extracted from the SPS into the transfer lines between the SPS and the LHC and stopped on dumps a few hundred metres before the LHC injection points. When the dump for the injection line of beam 1 was retracted, however, the beam appeared not to have made it into the LHC. It was lost in the injection septum magnets, a series of special magnets that guide the incoming beam into the LHC. The injection of beam 2 was also problematic. The extraction interlock system of the SPS did not allow the extraction of beam 2 without the transfer line dump being

(Continued from page 1)

in the line. The extraction interlock issue was solved during Friday night and beam 2 was successfully injected into the LHC at 4.50 a.m. onto the injection protection device situated upstream of the LHCb experiment.

In the course of Saturday morning, beam 2 was steered all the way to the LHC beam dump at Point 6. The beam dump kickers were synchronised with the injection kicker and fired at the moment of the beam passage to kick the beam into the beam dump channel and onto the 7-metre-long graphite beam dump block. After some investigations using beam, it was decided to switch the polarity of the beam

1 injection septa. At 5 p.m. on Saturday, beam 1 was successfully injected and made it all the way to Point 3, where it was stopped as planned on the collimators in that region.

Next, a programme of measurements was carried out until 6 a.m. on Monday. Among these measurements were: injection kicker waveform scans; shots on the dumps in the transfer lines for the LHCb and ALICE experiments – where the secondary particles produced allowed them to perform the alignment of the detectors and to test their trigger systems;

aperture measurements; beam dump synchronisation measurements; and beam loss monitor and beam position monitor response checks.

Several non-conformities were discovered and will be resolved in the coming weeks before the start-up of the LHC. The sector tests of 6-9 March 2015 proved to be a very useful exercise on many fronts. LHC start-up with beam at the end of March will certainly be made easier by the progress made last weekend.

Reyes Alemany, Verena Kain

BUILD YOUR OWN TINY LEGO LHC

A PhD student working on the ATLAS experiment has created a replica of the Large Hadron Collider using Lego building blocks. Nathan Readioff, from the University of Liverpool, submitted his design to Lego Ideas this week and is now awaiting the 10,000 votes needed for it to qualify for the Lego Review, which decides if projects become new Lego products. You can help this project, vote online now!

His Lego design is a stylised model of the LHC, showcasing the four main detectors ALICE, ATLAS, CMS and LHCb at the micro scale. Each detector is small enough to fit in the palm of your hand, yet the details of the internal systems are intricate, revealed by cutaway walls. Every major detector component is represented by a Lego piece. The models are not strictly to scale with one another, but the same size base is used for each one to maximise the detail that can be included and give a more uniform look to the set.

“I wanted to provide people of all ages with an entertaining building experience that would allow them to learn about the LHC and its incredible detectors,” says Readioff. “Hopefully, this Lego replica can serve as an introduction, inspiring people to find out more about particle physics and how the amazing work

done at CERN is leading us to unravel the workings of the universe.”

While working on a sample prototype of the Lego LHC, Readioff says he learned a surprising amount about CERN and the various detectors himself. “I understood ATLAS because that’s the experiment I work on, but I knew almost nothing about the other detectors,” he says.



A computer simulation of the miniature Lego LHC, complete with four detectors connected with blue dipole magnets.

Readioff researched the other detectors, and learned how they share the same basic features – silicon detectors, calorimeters, muon chambers – and yet use vastly different technologies and designs to achieve their goals. Besides the detectors, he says, he also learned how to assemble a robust Lego model and to question the designs recommended by a computer simulation.

“The first draft model of the ALICE detector was designed on a computer; it took me two hours to get the bricks to hold together and it would shatter at the slightest touch,” says Readioff. His final design replica is made to be robust, with parts that hold together well, helping the Lego builder to construct each detector within minutes. If you want to build your own miniature LHC now, you can do so using the complete instruction manuals and part lists already available on the “Build your own particle detector” website: <http://cern.ch/go/9jTQ>

To vote for Readioff’s Lego LHC design, register with Lego Ideas and click the “Support” button on <http://cern.ch/go/7HvS>

Abha Eli Phoboo

THE POETRY OF (POP) SCIENCE

Only one person from CERN, Thomas Otto, was among the winners of the POPScience international poetry competition recently run in the framework of the EU-funded project of the same name. The TE Departmental Safety Officer won in the English category with three poems inspired by CERN and its people.

After participating as a volunteer in the 2014 European Researchers’ Night – when the POPScience poetry competition was officially launched – Thomas Otto decided to take part in the contest with three poems inspired by CERN. “I’ve always been interested in poetry, but only as a reader,” says Thomas. “At that point I felt inspired and I began to think about all the associations and metaphors I could create to describe CERN and its life to a non-scientific audience.”

The three poems pay homage to the LHC, the CMS experiment and life at CERN.

During LS1, Thomas spent time walking in the tunnel, and that was where he found his inspiration. “I couldn’t help wondering how I could put my thoughts into images,” he explains. He thus chose the “cold” theme for the LHC poem, to represent the uniqueness of the machine, colder than outer space, and went on to describe the acceleration of protons using evocative images.

Among the CERN experiments he was particularly inspired by CMS “because of its elegance and compactness,” he explains.

“When visiting CMS you can see the whole experiment and realise how beautiful it is.” Thomas also thought about the magnetic field that “moves” the particles and visualised the giant and colourful CMS detector as “a mythical animal hunched deep in its cave, swallowing bunches of protons”, which then collide to “recreate the origins” of our Universe.

After writing two science-related poems, he decided to dedicate his last one to the people working at CERN. “I find it rather funny that scientists and technicians are addressing very complex issues in their daily working routine, but then have to face the apparently trivial problem of finding a parking space or queuing endlessly at the restaurants,” he concludes.

Rosaria Marraffino

I - LHC

Cold
Ice cold
Arctic cold
Nitrogen cold
Argon cold
Helium cold
Colder than the cosmos:
Superfluid helium cold

In the cold,
Powerful currents
Engender magnetic forces
Ushering protons left and right.

Protons travelling on the crests of ethereal waves
Close to light speed
100 billion at a time, a galaxy of protons.

Wave after wave emerging from the cold
Spilling galaxies into the void
Galaxies of protons collide
To recreate the origins."

Thomas Otto's winning poems

II - CMS

A cylinder from glass and steel,
A mythical animal hunched deep in its cave,
Swallowing bunches of protons,
Like a frog catching flies.

Protons colliding, the debris on paths bent by magnetic forces
Electrical signals through a network of cables
The animal's thoughts light up,
A memory of the origins.



Thomas Otto in Building 180 with an LHC magnet, one of the sources of inspiration of his poetry.

III - CERN

Bright minds
Tackling tough problems:
Accuracy of the data,
Beauty of the theory,
And origins of the visible universe.

Seasoned researchers,
At ease with latest physical science:
Handling strings and triggers,
Seeing light in crystals,
And integrating over 26 hidden dimensions.

At lunchtime,
A challenge like no other:
Looking for a parking space,
Queuing for a menu,
And searching a place to put their meal tray.

You can download Thomas Otto's e-book here: <http://cern.ch/go/8szF>.

All the e-books by the POPScience winners are available here: <http://cern.ch/go/rM7t>

THEY ROSE TO THE CHALLENGE!

The Challenge-Based Innovation programme is a Masters-level initiative developed at CERN in collaboration with many universities around the world. The first programme saw 45 students take part, and their final results were presented at an official "gala" held on 26 February.



On 26 February, after their official presentations, the six CBI teams presented their prototypes to the public in the IdeaSquare building.

As part of the IdeaSquare project, the Challenge-Based Innovation (CBI) programme is based on a very pragmatic question: can the tools and results produced by basic research (like that being carried out at CERN) be used to solve societal problems? If so, how? To answer this question, 45 students from very different professional and cultural backgrounds formed six teams, each with a specific societal challenge to solve.

Over a six-month period – from September 2014 to February 2015 – the six teams worked on the challenge in order to come up with an original idea and, eventually, a prototype. The projects presented at the February gala were thus the result of a very long process, from the understanding of the societal need to the development of a relevant and innovative product.

Team Maxwell (all the teams were named after famous physicists), for example, tackled confusion and disorientation in the elderly, which is one of the symptoms of Alzheimer's disease. Using the example of an old lady on her way to the pharmacy who suddenly forgets why she is there, Team Maxwell suggested a new device called EMMA – External Memory Monitoring and Assist.

EMMA, a discreet smartwatch, is equipped with biometric sensors able to detect moments of confusion by monitoring the pulse, skin temperature and conductivity, and body movements. The watch then displays a clear and simple message reminding her what she was doing: "I am going to the pharmacy" in this case.

Using the same device – a smartwatch – Team Schrödinger focused on another medical issue: Asperger's syndrome. The biometric sensors register numerous parameters (i.e. heart rate, the speed and volume of conversation) during the day, which can later be examined by the person with Asperger's. This will help users to identify the moments of the day (thanks to the clock and GPS data) where they were stressed or had an uncharacteristic social response (according to the volume of the voice, for example), and allow them to take action to improve their situation.

The four other teams – Ampère, Planck, Heisenberg and Faraday – developed, respectively, an inflatable skirt that protects elderly women suffering from osteoporosis when they fall; sensors helping facility managers to monitor and control the parameters inside buildings; a watch to help blind people "see"; and an intelligent food plate that provides information on the freshness of the fruits and vegetables in your fridge.

"Team Faraday just got accepted to an exhibition in *Cumulus Milan* during the Universal Expo, and I've even heard that one or two of the teams might be planning startup companies," says Joona Kurikka, a PhD student from Aalto University in Finland, who coordinated the course together with Tuuli Utriainen. "From our side, although we are not coordinating any structured follow-up programmes, we will try to help students who come up with interesting and viable plans."

Concerning the future of the CBI programme, it looks highly probable that another round will be organised in a few months... so stay tuned!

Watch the teams' presentations at the CBI "gala", which took place at CERN on 26 February: <https://cdsweb.cern.ch/record/1995424>.

Anaïs Schaeffer

DONATION OF CERN COMPUTING EQUIPMENT TO PAKISTAN

An official ceremony marking the eighth donation of CERN computing equipment to an outside institute, this time a university in Pakistan, took place on Monday, 2 March.



On this occasion, 224 servers and 30 network hubs were donated to the CIIT (COMSATS Institute of Information Technology) in Islamabad, Pakistan, where they will be used by scientists working on the LHC's ALICE experiment. For several years now, CERN has regularly donated computing equipment that no longer meets its highly specific requirements but is still more than adequate for less exacting environments. To date, a total of 1,149 servers and 79 hubs have been donated to eight countries, namely Bulgaria, Egypt, Ghana, Morocco, the Philippines, Senegal, Serbia and now Pakistan.

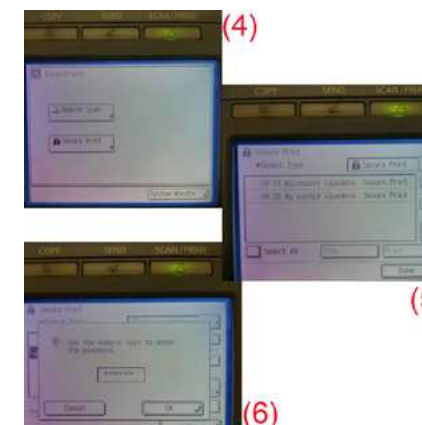
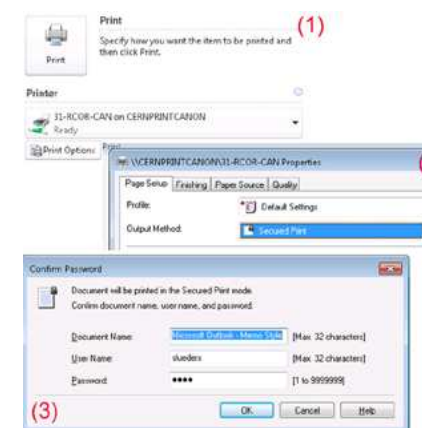
Anaïs Schaeffer

From left to right: Sajjad Mohsin, Dean at the COMSATS Institute of Information Technology (CIIT), Rolf Heuer, CERN Director-General, S. M. Junaid Zaidi, Rector of CIIT, Aumair Qayyum (CIIT) and Syed Ali Zahir Bukhari (CIIT).

Computer Security

PRINTING CONFIDENTIALLY

Have you ever hesitated to print a confidential document using CERN printers? Or perhaps you have rushed quickly to the printer after hitting the "print" button in order to avoid someone else getting hold of and reading your document? These times are over now with the new printing infrastructure!



Indeed, many of us regularly print out confidential documents like our salary slips, MARS forms, tendering documents and drafts of preliminary papers. The upcoming CERN data protection policy will require all of us to respect the confidentiality of such documents and, as the word "confidential" implies, access to "confidential" or sensitive documents will be tightly controlled. What can we do about the public printers located in many buildings, floors and shared spaces - accessible not only to CERN staff and users but also to visitors and guests? Some printers are located in the vicinity of restaurants, cafeterias or close to paths taken by visit groups. Of course, this contradicts the need for privacy when printing confidential documents.

Thanks to the CERN Print Service, the new printing infrastructure is now capable of ensuring the confidentiality of your documents: you can send a print job that is not printed until you input a PIN code at the machine. So the next time you have to print such a document, go to "Printer Properties" (1) and select the "Secure Print" method (2). Once you hit the "Print" button, you will get another dialog box asking you to provide a PIN number (3). On the right, you'll find screenshots of the different steps on the Windows platform. Instructions for Linux and Mac OS can be found in this ServiceNow knowledge base article: cern.ch/go/Qj9P

After you have provided the PIN, your document will be queued for the printer of your choice. For easy PIN input on the printer, we recommend you use any Canon machine. The printer will hold your document for the next 12 hours (4 hours on some models). Once you are at the machine, hit the "SCAN/PRINT" button, choose "Secure Print" (4), select the document you want to print (5), hit "Print", and punch in your PIN (6) (Note: this sequence may vary between printer models).

Your document is printed only after providing the correct PIN. And as you are now standing beside the printer, you can be confident that your confidential document is being handled confidentially.

P.S. Respect the environment. Don't print unless it is necessary. Confidential documents which are not printed at all are less likely to slip out of your control!

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

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

AT CROSS PURPOSES?

Very often, misunderstandings originate from the assumptions we make about people's intentions, even where in fact there are no actual differences in thinking. Sometimes, speaking up is enough to resolve these misunderstandings... provided this is what both parties want.

John comes to see the Ombud: he is very upset with his supervisor, who has refused to let him participate in an exciting project. John complains that his supervisor is short-sighted and unfair. He says that the project would enhance the work of the team while allowing him to develop his own skills. He insists that it's not the first time his supervisor has refused and that he doesn't understand the technical relevance of these projects. In probing further, the Ombud discovers that John is particularly disappointed because he believes these extended activities would give him greater visibility and improve his chances when applying for an indefinite contract at CERN.

In such cases, where the two people concerned seem to have reached a deadlock

in communication, one possible approach is mediation. This means the two people agreeing to discuss the problem, in the presence of the Ombud, with a view to finding a mutually acceptable way out of the situation.

When John's supervisor is informed of this issue, he shares his point of view with the Ombud: the reason he does not want John to work on these different projects is because he thinks that they will dilute his chances of getting an indefinite contract.

When a misunderstanding is brought to the surface, there is a good chance for it to be rapidly resolved. In the example above, the two people concerned have the same interests – that is, to increase John's chances

of having a long-term career at CERN – but they approach their goal from different positions, or ideas of how to achieve it. Unless they explain their respective perspectives, they both have their own reasons to think that the other is either blocking his career (John's point of view) or is just a stubborn character (supervisor's point of view).

Misunderstandings often come from misguided assumptions about other people's motives. It is always better to try and talk with supervisors and colleagues when you feel that the situation is not clear. The Ombud is available to help you to clarify your own objectives and support you in achieving a smooth resolution, thus avoiding further misunderstanding or conflicts. Come to see me as early as possible along the process, as this increases the chances of resolving issues rapidly and permanently.

Sudeshna Datta-Cockerill

CERN ACCELERATOR SCHOOL: REGISTRATION OPEN FOR ADVANCED ACCELERATOR PHYSICS COURSE

Registration is now open for the CERN Accelerator School's Advanced Accelerator Physics course to be held in Warsaw, Poland from 27 September to 9 October 2015.

The course will be of interest to physicists and engineers who wish to extend their knowledge of Accelerator Physics. The programme offers core lectures on accelerator physics in the mornings and a practical course with hands-on tuition in the afternoons.

Further information can be found at:

- <http://cas.web.cern.ch/cas/Poland2015/Warsaw-advert.html>
- <http://indico.cern.ch/event/361988/>

PROCUREMENT SERVICE LAUNCHES NEW ELEARNING MODULE

The Procurement Service has launched a training module covering "Procurement of supplies at CERN up to 200,000 CHF" in the form of an eLearning, accessible to all users involved in the procurement process. A long version (30 minutes) and a short version (10 minutes) are now available at: procurement.web.cern.ch/elearning



The objectives of this eLearning module are as follows:

- To improve users' knowledge of the Procurement Rules to facilitate the successful completion of a DAI. This will ensure their DAI is processed as quickly as possible;
- To decrease the number of single tender requests and to avoid non compliant procurement practices such as the fragmentation of requirements into smaller orders.

The eLearning module in its short version covers a range of topics, including the role of the technical officer, estimation of order amount (and the subsequent procedure to follow) and preparation and completion of the DAI form. The longer version also includes useful information about the role of the Procurement Service, determining the appropriate procurement strategy, preparation of a price enquiry and follow-up of an order. Both versions include questions to complement the training.

From 16 March 2015, before you can create your next DAI, you will be required to successfully complete the short version of the training by answering a minimum of 80% of the questions correctly in SIR.

THE MEDICAL SERVICE TEAMS UP WITH AN EXTERNAL LABORATORY

Since January, the CERN Medical Service has been collaborating with Proxilis, a medical testing laboratory in Meyrin, to carry out blood tests.

Sylvie Leprat, a nurse from the Proxilis laboratory, comes to the CERN Medical Service (Building 57, first floor) at 8 a.m. every morning to take blood samples.

These samples are then taken from CERN to the Proxilis laboratory, where they are analysed by machines, lab technicians or the team's biologist. The results are first conveyed to CERN doctors over the telephone. Then, at the end of the day, they are incorporated into the patient's medical file for validation and possible comments by CERN doctors, before being e-mailed to the patient.

People at CERN who are having blood tests done outside the context of their regular medical check-up receive an e-mail inviting them to choose a day and time for the blood samples to be taken. This provides a flexible service that allows appointments to be arranged according to their availability and changed if necessary, and also minimises waiting times.

Blood tests carried out as part of a regular check-up continue to be scheduled by the Medical Service secretariat.



Nicole Dumoulin in her laboratory at the CERN Medical Service.

This new collaboration follows the departure of one of our colleagues, Nicole Dumoulin, who, having worked as a lab technician in the Medical Service since November 1973, retired at the end of 2014 after 41 years at CERN. Highly valued by her patients and the whole Medical Service team, Nicole witnessed the evolution of the Service, which was established in 1965: "Throughout my career, I've always really liked CERN's academic atmosphere and cosmopolitan environment," Nicole says. "I've forged bonds with all my patients over the years, from young apprentices to ageing physicists who have forgotten to retire! Working here for 41 years, I've seen CERN change, ten new Directors-General take up their positions, and several patients receive Nobel prizes!"

The Medical Service team would like to thank Nicole for her professionalism and kindness and wishes her all the best for the future!

CERN Medical Service

TAKE YOUR BLOOD PRESSURE TO HEART! SCREENING PROGRAMME 24-27 MARCH

In Switzerland, one person in four suffers from high blood pressure without knowing it. This silent killer can only be detected by carrying out regular blood pressure tests.

Following our last campaign in October 2014, 30% of participants were found to have previously undetected hypertension.

This year, the nurses of the Medical Service are once again organising a blood pressure screening programme.

TAKE YOUR BLOOD PRESSURE TO HEART

The Medical Service's nurses will be running a hypertension screening programme

from 24 to 27 March 2015

Drop in to see them between 8.30 a.m. and 12.00 or 1.30 p.m. and 4.30 p.m. at the infirmary - building 57

or at their various stands between 9 a.m. and 12.30 p.m., in:

Building 40 on Tuesday, 24 March
Restaurant 2 on Wednesday, 25 March
the Main Building on Thursday, 26 March
Restaurant 3 on Wednesday, 27 March

BLOOD DONATION | 31 MARCH

BLOOD DONATION

Tuesday 31 March 2015 from 9.00 to 16.00
CERN, Restaurant n°2 (bât 504)

After the donation: snack offered by NOVAE and the HUG

www.dondusang.ch
GIVE BLOOD - ONE DAY YOUR LIFE MIGHT DEPEND ON IT

ROUTE SCHERRER CLOSED FOR CONSTRUCTION WORK

Please note that Route Scherrer will be inaccessible for two and a half months from the beginning of March.

Fermeture de la route Scherrer

Zone d'intervention
Fermeture de la route

Excepté circulation locale et services d'urgence

- 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.

THE BULLETIN TURNS 50!

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

WEEKLY BULLETIN
INFORMATION HEBDOMADAIRE

N° 1
30-3-05

Semaine
Week 29
Mars
March 3
Avril
April

COLLOQUIA SEMINARS
LECTURE SERIES

Thursday 1 April 4.30 p.m. Auditorium Seminar "LEPTONIC DECAYS OF HYPERONS"
H. Filthuth (Lehrstuhl für Hochenergie Physik, Heidelberg)
(D. Amati / J.C. Sene)

Friday 2 April 4.30 p.m. Council Room Seminar "HYPERON MISSING MASS EXPERIMENT"
A. Lundy (A.N. Diddens / D.N.O. Morrison)

REMINDER !
NEW !

ACADEMIC TRAINING

Thursday 1 April 11.00 a.m. Auditorium Theoretical Physics Course "FIAS INTERACTIONS"
S. Cobble and M. Voltan

ATTENTION !
CANCELLED

Your affiliation

For display

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Responsible: Michelle Fajard, 2786
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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
MANAGEMENT AND COMMUNICATION COURSES – PLACES AVAILABLE

Please note that there are some places available in the following Management and Communication courses.

For more information on the course, go to the Training Catalogue. You can then sign-up on line: cta.cern.ch.

| Course title | Next session | Language | Duration |
|--|---------------|----------|----------|
| Equilibre entre performance et pression (avant : « Gestion de stress ») | 27 & 28 avril | French | 2 jours |
| Balancing performance and pressure (former "Managing stress") | 4 & 5 May | English | 2 days |

PERSONAL DEVELOPMENT AND COMMUNICATION COURSES

Please find below the list of courses in the field of Personal Development and Communication which are scheduled before the end of July.

| Personal Development and Communication, in English | | | |
|---|--|----------|---|
| | Next Session | Duration | Availability |
| Communicating to convince | 15-16 April | 2 days | 2 places |
| Communication: Science or Art? (Workshop 1) | 28 April 18 May 26 May 27 May | 1 day | 4 places 10 places 12 places 11 places |
| Balancing performance and pressure | 4, 5 May | 2 days | 6 places |
| Personal Awareness & Impact | 6-8 May 10-12 June | 3 days | 3 places 6 places |
| Personal Awareness & Impact - Follow-up | 11-12 May | 2 days | 2 places |
| Handling difficult conversations | 12-13 June + 04 September | 3 days | 3 places |

In addition, the following courses are scheduled in French:

| Développement personnel et communication, en français | | | |
|---|--|----------|---|
| | Prochaine session | Durée | Disponibilités |
| Savoir gérer les discussions difficiles | 23-24 mars + 4 mai | 3 jours | 3 places |
| Communiquer pour convaincre | 13-14 avril | 2 jours | 2 places |
| Équilibre entre performance et pression (avant : « Gestion de stress ») | 27-28 avril | 2 jours | 6 places |
| Communication : science ou art (atelier 1) | 28 avril 18 mai 26 mai 27 mai | 1 jour | 4 places 10 places 10 places 12 places |
| Négociation efficace | 19-20 mai | 2 jours | 11 places |
| Techniques d'exposé et de présentation | 10-11 juin + 6 juillet | 3 jours | 5 places |
| Les enjeux de la voix et du comportement non verbal dans la communication orale | 29, 30 juin | 1 jour ½ | 6 places |
| Animer ou participer à une réunion de travail | 7-9 juillet | 3 jours | 12 places |

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

If you need a course which is not in the catalogue, please contact your supervisor, your Departmental Training Officer or HR-LD at Communication.Training@cern.ch.

TECHNICAL MANAGEMENT COURSES (BEFORE JULY)

Please find below the courses in the field of technical management scheduled before July and which have places available.

| Upcoming Technical Management courses (in chronological order) | | | | |
|--|----------|------------------------|----------|--------------|
| | Language | Next Session | Duration | Availability |
| Project Scheduling & Costing | English | 12-13 March | 2 days | 3 places |
| Managing by Project: GDPM | English | 18-19 March | 2 days | 3 places |
| Risk Management | English | 30-31 March | 2 days | 8 places |
| Dealing with Media questions! | English | 6 May | 1 day | 5 places |
| Dealing with Media questions! | English | 7 May | 1 day | 4 places |
| Introduction to knowledge transfer tools | English | 21 May | 4 hours | 12 places |
| PMI Project Management | English | 26/27 May + 18/19 June | 4 days | 8 places |
| Selecting the right person for CERN | English | 4 June | 1 day | 3 places |
| Quality Assurance | English | 15-16 June | 2 days | 10 places |
| Project Engineering | English | 29-30 June | 2 days | 10 places |

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

If you need a course which is not in the catalogue, please contact your supervisor, your Departmental Training Officer or HR-LD at Communication.Training@cern.ch.

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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.

Safety Training, HSE Unit

LANGUAGE TRAINING

General & Professional French courses

The next General & Professional French course will start on 4 May. These collective courses aim to bring participants who have at least level A1 to higher levels (up to C2).

The workload of each course is 60 hours and consists of a combination of face-to-face sessions (40 hours) with personal work (20 hours) following a specially designed programme.

A final progress test takes place at the end of the term.

**If you have not followed a French course in January
please sign up for a placement test!**

French courses for beginners

The aim of this course is to give some basic skills to beginners in order to be able to communicate in simple daily life situations in both social and professional life. These courses can start at any time during the year, as soon as a group of beginners has been identified.

Participants can apply for a semi-intensive (10-week courses with 6 hours of classes per week) course and choose between different schedules (morning-lunch time – late afternoon).

If you have doubts regarding your level of French - visit <https://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

French Oral Expression

These collective courses aim to bring participants with a good level of French to a higher level of oral expression in a professional context. The next Oral Expression course will start on 4 May.

The workload of the course is 40 hours and consists of a combination of face-to-face sessions (30 hours) with personal work (10 hours) following a specially designed programme.

**If you have not followed a French course in January
please sign up for a placement test!**

French Writing Course

These collective courses aim to bring participants with a good level of French to a higher level of written expression.

The workload of the course is 40 hours and consists of a combination of face-to-face sessions (30 hours) with personal work (10 hours) following a specially designed programme.

**If you have not followed a French course in January
please sign up for a placement test!**

Cours d'anglais - général & professionnel

Les prochains cours général & professionnel débuteront le 4 mai. L'objectif principal de ces cours collectifs est de permettre aux participants d'un niveau A1 de progresser pour atteindre un niveau supérieur pouvant aller jusqu'à C2.

Nous vous prions de remplir aussi une demande de formation pour un test de placement – ce test est obligatoire, même si vous avez déjà suivi des cours de langue au CERN.

Cours d'expression – anglais

Le prochain cours d'expression orale débutera le 4 mai. Ce cours s'adresse à un public ayant un bon niveau en anglais.

Cours d'expression écrite

Nous proposons deux cours d'expression écrite :

- Administrative
- Technical

Si vous souhaitez suivre un de ces cours, merci de bien vouloir remplir une demande de formation pour le cours et pour le test de placement.

For registration and further information about the courses or the language tandem programme, please contact Kerstin Fuhrmeister (70896, language.training@cern.ch).

Seminars

WEDNESDAY MARCH 18, 2015

14:30 ISOLDE Seminar TBA

THURSDAY MARCH 19, 2015

19:00 Globe L'efficacité énergétique au service des déplacements maritimes 80-1-001

TUESDAY MARCH 24, 2015

11:00 LHC Seminar Seminar on LHCb results Main Auditorium

WEDNESDAY MARCH 25, 2015

14:30 ISOLDE Seminar β -decay studies around ^{78}Ni : Investigation of neutron-rich Fe and Ni isotopes

THURSDAY MARCH 26, 2015

07:00 CFP Zewail City Mini-School First CFP Zewail City Mini-school on 'experimental tools in particle physics' CFP, Zewail City

FRIDAY MARCH 27, 2015

14:00 CERN Computing Seminar Transparadigm Programming IT Amphitheatre

TUESDAY MARCH 31, 2015

11:00 LHC Seminar Seminar on CMS results Main Auditorium