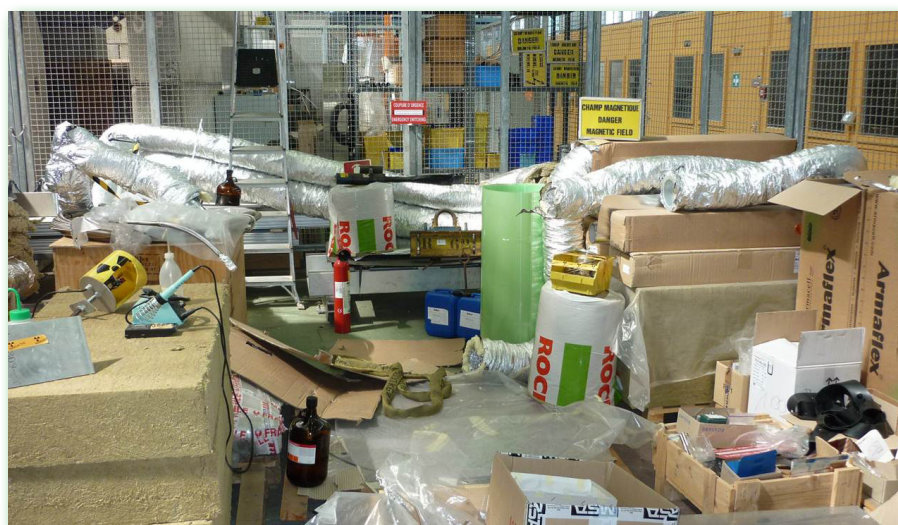


Prevention is better than cure



This site has a few (!) slight safety problems... Spot the mistakes! (Details of the game below.)

Ensuring that an HV electrical installation is properly earthed, that a system under pressure has no weak points, that an item of lifting equipment can be used without risk, that safety valves operate at the right pressure threshold as well as checking that a heavy object that could inflict injury if it fell is not stored on top of a cupboard: such are the types of inspections performed by the Safety Inspection Service (DGS-SEE-SIS). "These checks reassure those in charge of equipment and infrastructure that everything is in order or, when necessary, allow us to notify them of the need to undertake preventive action to pre-empt any malfunction or incident," underlines Enrico Cennini, Head of DGS-SEE Group.

The Safety Inspections Services section consists of a team of about 8 people and 2 contractors who are responsible for

Throughout the year, members of the Safety Inspections Services section of HSE Unit devote themselves to ensuring the safety of all infrastructure and equipment that represent a specific hazard within the Organization. They regularly comb through all CERN's infrastructure to forestall any accidents and their potential impact, true to the adage that prevention is better than cure.

checking some 1200 CERN infrastructures - administrative buildings, experimental halls, workshops, tunnels, technical galleries, etc. - and associated equipment

(Continued on page 2)

To take part in the "Spot the mistakes" game designed by the Safety Inspection Service you must be member of the CERN personnel (any category). Please, send a list of the seven safety problems in the photo to bulletin-editors@cern.ch. Two winners will be chosen at random from the correct answers. The first will get the opportunity to participate in the Lift12 conference. The second will receive a copy of the book LHC: the Large Hadron Collider.

**Please send your answers in by
Wednesday 25 January 2012.**



A word from the DG

Route de Meyrin-CERN: and the winner is...

Last night, CERN's engagement with society took an important step forward with the unveiling of the winner of the architectural competition for the Route de Meyrin between CERN's entrances A and B. The winning entry is a project entitled "Metaphoros", entered by Studio Bürgi of Ticino.

Metaphoros was selected by a jury, of which I was a member, from an

(Continued on page 3)

In this issue

News

- Prevention is better than cure 1
- A word from the DG: Metaphoros 1
- LHC Report: positive ion run! 3
- Behind the scenes at FameLab, the international competition for young scientists 4
- Funding innovation 5
- Data goes faster than ever 5
- New solutions for data management on the horizon 6
- Visiting CERN... like "common people" 6
- Inspired at a book fair 7
- Serbian President visits CERN 7
- Science Hack Day uses CMS data 8
- Why I like power cuts... 8
- Not just for printing: new services from the CERN Printshop 9
- Learning a profession at the CERN Library 9
- Ombuds' corner: Two striking features from last year 10
- New arrivals 10

Official news

- Take note 14
- External meeting 16
- Technical training 17
- Language training 18
- Seminars 19

Published by:

The European Organization for Nuclear Research - CERN
1211 Geneva 23, Switzerland - Tel. + 41 22 767 35 86
Printed by: CERN Printshop
© 2010 CERN - ISSN: Printed version: 2077-950X
Electronic version: 2077-9518

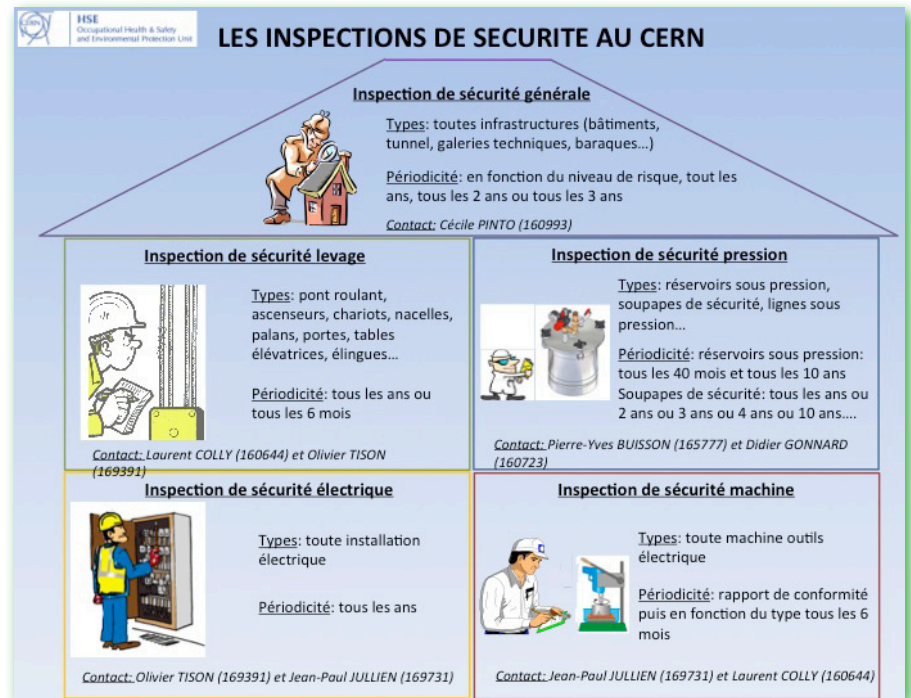
Prevention is better than cure

(Continued from page 1)

such as electrical installations, lifting gear, pressurised tanks or machine tools, and for ensuring their compliance with the relevant standard. "Our service is divided into five safety-inspection subsections: general, electrical, lifting, pressurised equipment and machine tools," explains Cécile Pinto, head of the SIS Section. "Our role is to assist the departments to operate responsibly in safety matters with the aim of reducing the number of accidents by eliminating or containing hazards. It is therefore also up to them to take the necessary measures, especially prior to a safety inspection!"

The general inspection consists of a comprehensive analysis of all risks, ranging from the risk of falling objects to the risk arising from incompatibility between chemicals. As Cécile Pinto emphasises, nothing is left to chance: "We check everything, from the basement to the roof. When we do our inspections we always take the plans of the buildings along with us to ensure that no nooks and crannies are overlooked."

After the inspection, the TSOs and DSOs (who are always informed of the visit even if they don't directly participate in it) get an inspection report. The report highlights any safety-related issues and how to address



them. "If we have any particular comments to make, we always address them directly to the person concerned," explains Cécile Pinto. "It is then up to that person to take

the necessary action. We try to remedy the maximum possible number of safety problems by calling on the expertise of members of the HSE Unit."

Anais Schaeffer



This photo, featured in an Easyjet magazine article about art and physics, shows another situation where safety could have been much improved.

Did you know?

The figures

In 2011, the SIS Section team inspected 679 infrastructures, 1113 electrical installations, 2269 items of lifting equipment, 3000 slings, 580 pressurised tanks, 3300 valves and 300 machine tools.

CERN's numerous electrical installations are inspected annually. General inspections take place every one to three years, depending on the level of risk that the building represents. Lifting gear - overhead travelling cranes, slings and lifting beams - as well as lifts and automatic doors are inspected once a year (forklift trucks and boom lifts every six months). Pressurised tanks (those in excess of 0.5 bar) are inspected every 40 months and safety valves every one to 10 years.

LHC Report: The machine under maintenance

The maintenance work is being carried out on key infrastructure such as the cooling, ventilation, electricity and safety systems. Maintenance work is being carried out not just in the LHC but also across the whole accelerator complex, which makes planning the work even more complicated.

At the time of going to print, 50% of the cryogenics system maintenance has been finished, which, according to the schedule, will allow the LHC teams to start cooling down the first sectors next week to have the entire machine cold by the end of February. A lot of activity is going on in order to mitigate the effects of radiation on equipment installed in the LHC tunnel and underground areas during 2012 operation. To this end, teams have installed additional shielding at Point 1 (see photo) and they are relocating the UPS modules at Point 5. In addition, some preparatory underground civil engineering work is being carried out in order to allow improved shielding in the machine tunnel around Point 1.

The LHC Christmas break started on 12 December. Since then, teams have been working hard to complete all the maintenance work planned to ensure the reliable operation of the LHC in 2012.

The aim of this work, which is being organized and coordinated by the Engineering Department, is to ensure reliable LHC opera-

tion in 2012. In order to help with the complex task of coordinating all the different activities, a new GS-AIS tool has recently been made available to the team in charge of the work-planning and coordination. This tool, called IMPACT (password protected) is now used to perform, approve, and track all the activities.

Katy Foraz for the LHC Team



Installation of shielding at Point 1.



(Continued from page 1)

Route de Meyrin-CERN: and the winner is...

impressive range of proposals from around the world. It will be some time before construction gets underway, but anyone who'd like a forward look at how the gateway to CERN will look from 2014 can visit an exhibition in the Globe opening today and running until 28 January. The exhibition focuses on the winning entry, but also has a place for the runners-up, and for the Cosmic Rings of CERN proposal for buildings and landscaping around the Globe, which, subject to external funding, will merge seamlessly with *Metaphoros* as the next phase in the redevelopment of CERN's public spaces. Over the long term, our vision is to develop the entire zone between entrances A and B into a vibrant new

interface between CERN and society, incorporating a new Main Building with a 1000-seat auditorium that we'll share with our neighbours.

Engagement with society is a vital part of CERN's business, and our host region has a particularly important place for CERN. The Laboratory plays a significant role in the area, and developing our public spaces shows our commitment to being an active member of the community. The competition for the Route de Meyrin was organized in that spirit of engagement, as a collaboration between CERN and the Republic and Canton of Geneva, which will finance the project's construction. The competition

also enjoyed the support of the Ville de Meyrin and the Swiss Confederation. It is being billed at the first step in the broader coordinated development of the region encompassing Geneva, Vaud and neighbouring France (the *projet d'agglomération franco-valdo-genevois*).

Locally, then, *Metaphoros* is a sign of CERN's renewed will to open up to society and to share what we do with a much broader public. On a larger scale too, it is a perfect metaphor for our global vision of science as an integral part of society.

Rolf Heuer

Behind the scenes at FameLab, the international competition for young scientists

As you might have read in the 5 December 2011 issue of the Bulletin, Switzerland is one of the 20 countries participating in the FameLab 2012 competition, and the regional finals for French-speaking Switzerland will take place at CERN in the Globe of Science and Innovation on Saturday, 4 February 2012.

"At the moment we're still recruiting participants through various channels (registration is open till 31 January) and organising the one-day programme of events in the Globe," says project coordinator Paola Catapano of the CERN Communication Group. "The morning will be devoted to registering and auditioning participants for the afternoon's national semi-finals.

Before each audition, participants will be assigned to the "Blitz Trainers", professionals in communication techniques and science communication, to rehearse their three-minute presentations and get some last-minute tips. Training and feedback on communication skills are an important part of the FameLab process, from the regional to the international finals."

FameLab is an international science communication competition for young researchers and science teachers aged 18 to 35. At CERN, preparations are under way to recruit participants, advertise the event to the public and organise the regional semi-finals for Suisse Romande, which will take place on Saturday, 4 February 2012 in the Globe of Science and Innovation. The Bulletin looks ahead to the forthcoming event...

Particularly valuable will be tips from the "compères", young physicists Tom Whyntie (from Imperial College London and CMS, and winner of the 2009 UK FameLab competition) and Venelin Kozhuharov (from CMS, and winner of the 2008 Bulgaria FameLab competition). Whyntie is eager to encourage young scientists in Switzerland to take part in FameLab: "The media training I received has been incredibly useful for television and radio appearances (and there have been quite a few with all of the Higgs hype!), but the best thing about FameLab is the people you meet. By taking part in FameLab Switzerland, you will meet great, like-minded people from CERN and elsewhere who love to talk about science."

"We didn't see it very much as a competition," says Venelin, speaking of the year he won FameLab, "but mainly as a way to share what we were doing. The year I took part, most of the participants talked about their

own scientific research. Along with making new friendships, we were able to learn new things from the other participants."

The three-minute presentations will be judged according to three main criteria (content, charisma and clarity) by a panel including CERN theoretical physicist, John Ellis; astronomer and head of communication at Geneva University, Didier Raboud; and science editor at the Tribune de Genève, Anne-Muriel Brouet.

To participate, fill out and submit the registration form by the 31 January deadline on www.famelab.ch/. (Click on Participate/Registration.)

CERN Bulletin



Did you know?

Audience welcome in the globe of science and innovation on Saturday 4 February!

FameLab talks must be scientifically accurate but also engaging to non-scientists. As such, audience reaction is a crucial element in impressing the jury. Come to the auditions in the morning and the regional finals at 3.00 p.m. to help 21st century science find its new talent!

Go to <http://outreach.web.cern.ch/outreach/evenements/conferences.html> for more information about the FameLab Globe event.

The FameLab event in the Globe of Science and Innovation is jointly organised by CERN, the University of Geneva and EPFL Lausanne, with the support of the British Council

- **Open to all**
- **Entrance free**
- **Seats are not numbered but seating is limited to a maximum of 200**
- **No reservation needed**

For more information, visit the FameLab website or write to info@famelab.ch

Funding innovation

GEM detectors for flame detection and early earthquake prediction, radio-frequency absorbers for energy recovery, and exotic radioisotopes for medical applications are among the projects funded by the recently introduced KT Fund. "CERN's scientific programme generates a considerable amount of intellectual property, a natural driver for innovation," explains Giovanni Anelli, Head of the Knowledge Transfer Group. "Very often, though, financial support is needed to bring the newly-born technologies a step further and make them ready for transfer to other research institutes or to companies."

This is where the KT fund comes into play. It provides vital support in the early stages of KT projects, regardless of their field of

For the first time, six knowledge and technology transfer activities are set to benefit from a dedicated fund made available by the Knowledge Transfer group. This initiative cements CERN's commitment to sharing its technological knowledge and expertise with society.

application, as long as it is of use to society and in line with CERN's principles. The positive response from CERN inventors confirmed the need for such an initiative. In 2011, projects were submitted from four Departments – Physics, Beams, Engineering, and General Services and Infrastructure. They dealt with technologies with potential applications in a wide range of fields, from education to hadrontherapy, astronomy, homeland security, environmental safety and energy recovery.

In order to qualify for support, the projects were evaluated by the KT Fund Selection

Committee, which is chaired by Thierry Lagrange, Head of the Finance, Procurement and Knowledge Transfer Department, and includes all the Heads of Department and representatives of the KT group. "The quality of the projects submitted and their areas of application have been remarkable," confirms Rolf Heuer, CERN's Director-General. "In the spirit of maximizing the dissemination of our technologies and their positive impact on society, the Management has decided to increase the fund to fully support the initiatives."

Applications for the 2012 KT Fund are accepted throughout the year. All details on the KT fund, such as submission and selection procedures, are available on the new KT website at :

<http://knowledgetransfer.web.cern.ch/>

Marina Giampietro

Data goes faster than ever

At November's SuperComputing 2011 (SC11) convention in Seattle, the Caltech team sent LHC data between the University of Victoria and the Seattle exhibition floor at a full duplex speed of 186 gigabits per second on a 100 Gbps circuit provided by CANARIE and BCnet. This is a 10-fold increase compared with the current 10 gigabits per second circuits between CERN and each of the 11 major GRID Tier 1 centres that receive LHC data, and you can see why the result made headlines in the IT world.

"What is remarkable about the Caltech experiment is the use of 'commodity' technology – that is, the use of computing resources that are commercially available as part of a careful end-to-end systems design," says David Foster, Deputy Head of the CERN IT Department who attended the SC11 conference. "While terabit technology (that's 1024 gigabits/sec) is being demonstrated under laboratory conditions, 100 Gbps technology is now making it into the mass market. The Caltech team took this commodity equipment combined with state-of-the-art software and delivered state-of-the-art results. CERN is already deploying 100 Gbps circuits internally and will do so internationally this year."

Using store-bought computers and commercially available optical fibre lines, researchers from the California Institute of Technology (Caltech), the University of Victoria, the University of Michigan, CERN and Florida International University broke the world speed record for LHC data transfer. They caught the attention of HEP experiments worldwide – including the LHC – which rely on ever-improving technology to share their results.

Transferring data from one place to another requires much more than just a high-speed network cable – there is a whole system of components including computers, interfaces, disks and software that need to be tuned to work together efficiently. Increasing network bandwidth alone is not enough to produce excellent data transfer rates. The Caltech team took this "whole systems" approach to the problem of data transfer and achieved these record-breaking results.

The landmark exercise could have far-reaching consequences for the LHC experiments and other high-energy physics experiments worldwide. Last year, the LHC produced over 22 PB of experimental data – that's equivalent to over 5.5 million DVDs of data - compared to the planned 15 PB of data. If this data production continues to increase, the transfer rate between CERN and its partner institutions will have to increase as well.

"We are constantly monitoring these types of exercises," says Foster. "As we work



The equipment used by the Caltech team to break the data transfer record. Photo credit: D. Foster.

together with institutes like Caltech and the University of Victoria to improve the technology of data transfer, we will be able to adjust and improve how we distribute LHC data to collaborating institutes."

Katarina Anthony

New solutions for data management on the horizon

New types of databases, called NoSQL, are promising a different way to access large amounts of data. The languages used in NoSQL are far less complicated, making the initial set-up much easier. In addition, data can be stored in a more flexible way, promising a faster way to access and manage data.

The CERN Database Group in the IT Department is participating in small-scale tests of NoSQL solutions with three of the four large detectors (CMS, ATLAS and LHCb). Over the past few months, non-relational database vendors – including Google, Hadapt, and Oracle – have also been presenting their NoSQL solutions to the IT Department.

Almost all large-scale scientific experiments, including those at CERN, manage their data using relational databases, accessible with a programming language called SQL (Structured Query Language). But, as the amount of data continues to grow, there are also growing doubts that relational databases are the best solution.

“We have used the Oracle relational database for 30 years,” says Tony Cass, leader of the CERN Database Group. “Most people would probably expect this for administrative applications, but Oracle was introduced at first to support the construction and operation of the Large Electron-Positron Collider (LEP). Today, if Oracle doesn’t work, the LHC accelerator doesn’t work.”

“CERN’s Oracle databases have been highly optimized to deliver fast performance, and it takes time and expertise to adapt the databases for new queries,” continues Cass. “In contrast, creating NoSQL solutions for a novel application is often very rapid.”

“Some NoSQL databases are the best fit for certain problems,” says Simon Metson, who is in charge of the Data Management and Workflow Management team at CMS, which tested the implementation of NoSQL databases last year. “They do not require a lot of new written code to manage data.”

As yet, no one has done a comparison of use for large-scale data at CERN. Will a NoSQL solution be faster? No one knows. “In a year’s time we’ll have a better understanding of the different NoSQL implementations, and we’ll have a growing realisation of what is appropriate,” says Cass.

This is an edited version of a story that first appeared in iSGTW, go to:

<http://www.isgtw.org/feature/following-red-brick-road-data-management>

to read the full story.

Adrian Giordani

Visiting CERN... like “common people”

Paul Young, famous for his interpretation of “Love of the Common People”, came to CERN because his teenage son is going to be studying A-level physics at school next year and wanted to visit the Laboratory. “I was fascinated by the visit. CERN is a place I didn’t know much about, but my son knows a lot more about science than I do. The explanations we got

Paul Young, the British pop star who made his name in the 80s, came to visit CERN on 17 December. His son brought him here because of his passion for science in general and physics in particular. Father and son found the visit exciting and CERN’s activities really thrilling. We could even expect a surprise for Paul’s next visit...

were great. We enjoyed the visit very much,” he said enthusiastically.

Paul Young and his son visited the CMS underground cavern with Michael Hoch.

“The most interesting thing for me was when Michael said that physicists always remain sceptical. So, even when you discover something, you try to disprove it,” he commented. During their visit, Paul and his son were accompanied by CERN’s Rolf Landua, and Patrick Geeraert and Simon Lowery from ESO, who brought the artist to CERN. Martyn Ware (Human League, Heaven 17) used the opportunity to visit CERN for the second time, this time with his family.

“The visit made me feel rather humble. There are such big and great things going on... I now have a different underlying understanding of what I am doing myself,” concluded Paul. At the end of the short interview, we dared to ask if he could sing a couple of his songs for us next time he comes to CERN and he said, “I have just performed at the ESO Christmas party. I would be happy to do the same at CERN.” Seeing the enthusiasm in his eyes, we are not sceptical this time!

Antonella del Rosso



The visiting group in the CMS Control Room (Photo credit: P. Geeraert, ESO).

Inspired at a book fair

Fifteen year-old Marcus lives in Lauterecken near Frankfurt. The popular book fair last autumn was for him a nice opportunity to get in touch with the CERN environment. Inspired by the stand and what the CERN people were describing, he started to ask more and more questions... So many, that Rolf Heuer decided to invite him to come to CERN and find out some of the answers for himself.

A few weeks later, while recovering from an exciting visit to the ATLAS underground cavern and other CERN installations with a cup of tea in Restaurant 1, Marcus shared his enthusiasm about the Organization: "When I was younger, my mother gave me A Short History of Nearly Everything by Bill Bryson. The first part of the book dealt with particle physics and sparked my interest in the subject. Today, I have been able to visit

During the Frankfurt book fair last October, the CERN stand drew quite the crowd. Director-General Rolf Heuer was there to promote CERN's mission and the "LHC: the Large Hadron Collider" book. He met a lot of visitors and for one of them there was also a nice follow-up...

LINAC4, SM18, the CCC, the Computing Centre and the Globe. I even had the opportunity to go underground to see the ATLAS cavern, and I have been very impressed by how huge the detector is. It's gigantic!"

Determined to study particle physics at university, Marcus may soon be pacing up and down the CERN corridors as a physicist. He would then be adding his own German flavour to the international melting pot that charmed him so much during his visit.



Marcus and his father visiting the LINAC facility.

Anaïs Schaeffer

Serbian President visits CERN

Before the signing ceremony, the President, welcomed by Director-General Rolf Heuer at CERN's Point 5, took the opportunity to visit CERN. After a general introduction, the President took advantage of the shutdown to visit the LHC's underground caverns. Leading the President through their respective experiments were spokespersons Fabiola Gianotti (ATLAS) and Joe Incandela (CMS).

After a morning of tours, President Tadić and Rolf Heuer signed the Agreement. Serbia's status as an Associate Member as pre-stage to full Membership is expected to come into force following ratification by the Serbian Parliament. After a maximum period of five years, the CERN Council will decide on the admission of Serbia to full Membership.

This new agreement continues Serbia's long-standing involvement with CERN, which dates back to the foundation of the Organization.

On Tuesday 10 January, Serbian President Boris Tadić visited the Laboratory to sign the Agreement of granting the status of Associate Membership as the pre-stage to full Membership of CERN.



For information about CERN and Serbia, go to :

<http://international-relations.web.cern.ch/International-Relations/nms/Serbia.html>

Katarina Anthony

Science Hack Day uses CMS data

First of all, you need to know what “hack” means. A hack is a quick solution to a problem, often the cleverest one if not the most elegant. So, a Science Hack Day is a 48-hour all-night event that brings together “hackers” to create innovative solutions to scientific problems.

Science Hack events: a new way for scientists, designers and other techno-savvy people to interact. The most recent Science Hack Day was held in San Francisco and with it the CMS collaboration found an original and simple way to present its data. Science Hack events: a new way for scientists, designers and other techno-savvy people to interact. The most recent Science Hack Day was held in San Francisco and with it the CMS collaboration found an original and simple way to present its data.

This year’s event was held in San Francisco from 12 to 13 November and was a huge success! It hosted around 150 science “hackers” from five continents, and presented challenging events from different scientific fields. In the “LHC Data Hack” event, results from CMS presented “hackers” with a tough challenge: presenting this scientific analysis in a way that allows people to learn, create art or even come up with new science.



Participants in the CMS hack event. (Photo credit: Morris Mwangi.)

The group that accepted the LHC challenge was made up of people from surprisingly different backgrounds, from science to art and engineering. Together they created a website that demonstrates and explains a very complex LHC dataset to a general audience. To do so, they decided to create two histograms that depicted parts of the analysis process. A day later, the hacking stopped and the “LHC team” had managed to finish its projects in the stipulated time.

So there it is: creative, clever and awe-inspiring innovations created in only a weekend in an amazing collaboration of science and technology. So if you’re a coder, designer, scientist, hacker or just an enthusiastic person with good ideas, Science Hack Day is for you!

To read CMS News’ coverage of the hack event, go to:

<http://cms.web.cern.ch/news/diving-cms-data-science-hack-day>

Katerina Sandoval



Computer Security
Sécurité informatique

Why I like power cuts...

But don’t think I am egotistic enough to endorse power cuts. Not necessarily! I am already happy if you regularly patch your computer(s) yourself, where regularly means at least once a month:

- If you run a **centrally or locally managed** Windows computer, give that small orange blinking “CMF” icon in the taskbar a chance in the evening to apply all the pending patches. Also, let it initiate a reboot at the end!
- If you have a personal computer with **your own Windows** operating system, check for “Windows Update” in the program listing of the Start button. Switch to the recommended “automatic” updating method!
- On **Linux distributions**, make sure that you regularly run “yum update”. Or even better, enable automatic

Accidental power cuts - a permanent nuisance when running accelerators or computing services, since it takes a lot of time to recover from them. While I feel very sorry for those who are under pressure to get their service running again and deeply regret the loss of down-time and availability, I must admit that I like power cuts: power cuts make computers reboot! And rebooting computers at CERN means all the pending software patches are automatically applied.

updates (<http://linux.web.cern.ch/linux/scientific5/docs/softwaremgmt.shtml>). Don’t forget to reboot your computer when a new kernel is installed, in order to properly apply kernel patches!

- For **Apple Macs**, use the software update mechanism accessible from the Apple menu.
- Finally, familiarize yourself on how to update your mobile devices, e.g. iPhones, iPads or Android phones.

Of course, there’s more to patch than just the operating system. Pay attention to

notification messages issued when running your favourite applications. If your application is supported centrally by CERN’s IT Department, it will make the necessary adjustments. However, if this is a program you have downloaded and installed from the Internet it is up to you to ensure it is up-to-date and patched... If you are in doubt (and use a Windows system), you can install and run this fine program from Secunia (http://secunia.com/vulnerability_scanning/personal) which checks your computer for outdated software.

Thus, help us eliminate the need for power cuts: patch your computer in a timely manner.

For further information, please check our recommendations (https://security.web.cern.ch/security/recommendations/en/how_to_secure_your_pc.shtml) or contact us at Computer.Security@cern.ch.

Computer Security Team



Printshop
Imprimerie

Not just for printing: new services from the CERN Printshop

You probably already knew that the CERN Printshop offers some standard printing services, including CERN calendars, business cards and a scanning service. These are detailed in the box below. But it has now added some new services that will be useful for many different purposes at CERN.

Do you need a notice that will last or a protective covering for a document that many people will use? The Printshop is now offering a **lamination service** for all documents in A5, A4 and A3 formats.

Going to a conference? Or organising a meeting? You can get from the Printshop:

- **tubes for posters** in various sizes;
- plastic **conference badges** with pin and clip – don't forget they can print your conference badges for you as well.

The Printshop will have a limited stock of tubes and badges available. You are recommended to order your items directly via the EDH Lyreco catalogue – for details see the Printshop website at:

<http://service-printshop.web.cern.ch/service-printshop/>

The CERN Printshop is introducing a series of new services to complement its existing ones. Laminating services, conference badges, tubes for posters and a new way of ordering external printing are all now available.

Some printing jobs need equipment not available at CERN. To facilitate ordering outside work, the Printshop is pleased to announce that it has negotiated new contracts with two external companies: **Imprimerie Villière** and **Imprimerie Romanzin**. The procedure to follow, including full contact details, is detailed on the Printshop website.

Should you not wish to use either of these two suppliers, the CERN Financial Rules specify that you must request three bids from other companies and choose the cheapest. All offers, including the rejected bids, must be attached to the DAI.

If you are interested in any of these services, go to the CERN Printshop website for more information and the price list (website accessible only from inside CERN).

Alternatively, phone the Printshop on 72426, or just call in. The Printshop is located opposite the Main Building in Building 510/R-007. Reception opening hours are 10.00-12.00 and 13.00-15.00.

Natalie Pocock and Joannah Caborn Wengler

Printing: standard printing services on high-volume, fast machines for producing professional documents in black and white and/or colour in A4 and A3, on paper or card, with a variety of finishes such as stapling or binding.

CERN calendars: copies of the 2012 wall calendar are available on card in both A4 and A3 formats. For bulk orders, please send an e-mail with budget code in advance. The file is also available on the website.

Business cards: please complete the online at http://service-print.web.cern.ch/service-print/business_card.htm.

Scanning service: your documents can be scanned and sent back to you as high-resolution PDF files.



Library
Bibliothèque

Learning a profession at the CERN Library

News from the Library

For more than 10 years the CERN Library has been providing apprenticeship posts in information science. This apprenticeship lasts three years, during which apprentices share their time between school and work at CERN. The apprenticeship is governed by the laws, regulations and contracts in force in the Canton of Geneva. If they pass the final examinations,

As you all know, training is very important at CERN, and each year the Organization welcomes thousands of students in various areas. However, did you know that it is also possible to learn the profession of Library Assistant (Agent en Information Documentaire - AID)?

apprentices get the Certificat fédéral de capacité suisse (CFC).

The library has trained some fifteen apprentices - who have then gone on to work in different institutions in Geneva or

elsewhere in Europe - and it is continuing its momentum with a new apprenticeship post, available from September 2012. For more information on apprenticeships in Geneva, please contact the *Office pour l'orientation, la formation professionnelle et continue* (OFPC) at:

<http://www.ge.ch/ofpc/>

For information on AID apprenticeships at CERN, please contact: Anne.Gentil-Beccot@cern.ch.

CERN Library



Ombuds' Corner *Le coin de l'Ombuds*

In this series, the Bulletin aims to explain the role of the Ombuds at CERN by presenting practical examples of misunderstandings that could have been resolved by the Ombuds if he had been contacted earlier. Please note that, in all the situations we present, the names are fictitious and used only to improve clarity.

Two striking features from last year

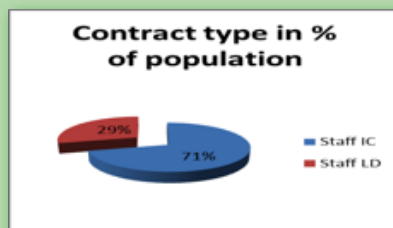
Happy New Year 2012 to all! At the beginning of this New Year, I would like to draw your attention to two important features that appeared from the statistics on the numbers and classes of visitors who came to the Ombuds during the first year of operations. The number of women was by far superior to the number of men who visited the Ombuds, when compared to the actual CERN percentage in such categories. The number of people visiting the Ombuds holding a Limited Duration contract was surprisingly lower than the number of visitors with an Indefinite appointment.

In terms of pure number of visitors, the Ombuds met around the same number of men and women. However these numbers show a very different picture for the CERN staff if they are converted into percentages based on the overall distribution of men and women at CERN. The percentage of female CERN staff who met the Ombuds compared to the female CERN staff population is 5.3%, while for men it is 2%. That means 2.7 times more female CERN staff – almost a factor 3 above men – used the Ombuds' services.

There are also striking differences, when converted into percentages of the CERN population, between the categories of the staff members, depending on whether the people have an Indefinite (IC) or a Limited Duration (LD) contract. The difference



Gender of the CERN staff using the Ombuds' services, weighted according to male/female ratio at CERN.



The contract types of CERN staff using the Ombuds' services.

between visitors based on their contract type is almost a factor 2.5. Much less staff with an LD contract contacted the Ombuds. Further observations lead me to believe that this difference is coming from the type of contract and not from the different duration of the contract.

Conclusion

I will let you draw your own conclusions. However, I think that we should improve our impartiality towards gender and type of contracts. The new programme favouring Diversity is certainly an excellent move in such a direction.

Contact the Ombuds early!

<http://cern.ch/ombuds>

Vincent Vuillemin

New arrivals

On Thursday 15 December 2011, at the second part of the Induction Programme, members of CERN Management welcomed

recently-recruited staff members and fellows (photographed here with Jean-Marc Saint-Viteux, Deputy Head of HR

Department and Vincent Vuillemin, CERN Ombuds).

HR Department





Members of the personnel shall be deemed to have taken note of the news under this heading. Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN Management.

ADJUSTMENTS TO FINANCIAL BENEFITS AND CONTRIBUTIONS WITH EFFECT FROM 1 JANUARY 2012

In accordance with recommendations made by the Finance Committee and decisions taken by Council in December 2010, June and December 2011, certain financial benefits and contributions impacting salaries and stipends have been adjusted with effect from 1 January 2012.

1) Five-yearly review 2010 (decisions taken by Council in December 2010)

- In line with the second phase of Council decisions, increases of 1% and 2% have been applied to basic salaries in Career Path D and Career Paths E to G respectively¹⁾;
- In addition, Health Insurance Scheme contribution rates have been modified (from 4.27%) to 4.41% for the member and (from 6.59%) to 6.86% for the Organization.

2) Package of measures towards restoring full funding of the Pension Fund (decisions taken by Council in June 2011)

- In accordance with Council decisions, the Organization's contribution rate for

new members of the Fund as of 1.1.2012 is 17%. The provisions for current members remain unchanged.

3) Annual adjustments (decisions taken by Council in December 2011)

- As a result of the evolution of the Geneva consumer price index, no adjustments have been made to:
 - o the scale of basic salaries or to stipends paid to Fellows (Annexes R A 5 and R A 6 of the Staff Regulations).
 - o the subsistence allowances of Paid Associates and Students (Annex R A 7 of the Staff Regulations).
 - o the following social benefits:
 - + Family, child and infant allowances (Annex R A 3 of the Staff Regulations)
 - + Payment ceilings of education fees (Annex R A 4 of the Staff Regulations)

Department Head Office
HR Department

¹⁾ Due to recalculation of the C coefficients, contributions to the Pension Fund may lead to a difference of up to one Swiss Franc across all career paths as a consequence of rounding effects.

TO ALL MEMBERS OF PERSONNEL IN RECEIPT OF REMUNERATION FROM CERN

In 2012 net monthly remuneration will be paid into individual bank accounts on the following dates:

- * Wednesday 25 January
- * Friday 24 February
- * Monday 26 March
- * Wednesday 25 April
- * Friday 25 May
- * Monday 25 June
- * Wednesday 25 July
- * Friday 24 August
- * Tuesday 25 September
- * Thursday 25 October
- * Monday 26 November
- * Wednesday 19 December

Department Head Office
HR Department

PENSION PAYMENT DATES IN 2012

- * Friday 6 January
- * Tuesday 7 February
- * Wednesday 7 March
- * Tuesday 10 April
- * Monday 7 May
- * Thursday 7 June
- * Friday 6 July
- * Tuesday 7 August
- * Friday 7 September
- * Monday 8 October
- * Wednesday 7 November
- * Friday 7 December

ADMINISTRATIVE CIRCULAR NO. 26 (REV. 9) – RECOGNITION OF MERIT

Administrative Circular No. 26 (Rev. 9) entitled "Recognition of Merit", approved by the Director-General following discussion in the Standing Concertation Committee meeting on 27 September 2011 is available on the intranet site of the Human Resources Department:

<https://cern.ch/hr-docs/admincirc/admincirc.asp>

The circular was above all revised in order to integrate the new CERN Competency Model into the annual procedure of performance appraisal.

It cancels and replaces Administrative Circular No. 26 (Rev. 8) entitled "Recognition of merit" of September 2008.

Department Head Office
HR Department

EXTENSION OF THE PRE-RETIREMENT PROGRAMMES

Following recommendation by the Standing Concertation Committee at its meeting on 2 December 2011 and approval by the Director-General, please note that:

- the Progressive Retirement Programme has been extended by one year, from 1 April 2012 until 31 March 2013; and
- the Part-Time Work as a Pre-retirement Measure has also been extended by one year, from 1 January 2012 until 31 December 2012.

Further information is available from the following sites:

https://cern.ch/admin-eguide/retraite/proc_prp.asp

https://cern.ch/admin-eguide/retraite/proc_pTp.asp

Department Head Office
HR Department



Members of the personnel shall be deemed to have taken note of the news under this heading. Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN Management.

MODIFICATIONS TO THE RULES OF THE CERN HEALTH INSURANCE SCHEME (CHIS) ON 1 JANUARY 2012

Following the 2010 five-yearly review of the financial and social conditions of the members of the personnel, the Council decided to make a number of changes to the contributions to the CERN Health Insurance Scheme and to authorise the Director-General to take timely measures to limit the increase of CHIS expenses by encouraging the use of health care providers and treatments which provide the best quality-to-cost ratio. These decisions are intended to allow the general level of cover to be maintained in the future.

The CERN Health Insurance Supervisory Board subsequently gave careful consideration to measures which would not only allow costs to be contained but would also ensure a fairer distribution of benefits while simultaneously providing greater protection for those suffering from serious health problems and hence having to face substantial expenses.

On the proposal of the CHIS Board, and following examination by the Standing Concertation Committee at its meetings on 27 April and 1 September 2011, the Director-General has approved new rules, which will enter into force on 1 January 2012.

The following changes will affect all insured members:

1. The 200 CHF annual deductible will no longer be applied, so that all insured members will henceforth be entitled to reimbursement without having to exceed a given level of expenditure.
2. New General Reimbursement Rule: the reimbursement rate will be progressive and depend on the total Costs Borne by the Insured Member (known by the French acronym "FCA") during a given calendar year, as shown in the table below:

Costs Borne by the Insured Member (FCA) during a calendar year	Reimbursement rate
Up to 499.99 CHF	80%
From 500 CHF and up to 2999.99 CHF	90%
3000 CHF	100%

3. Changes in the tariff systems of public hospitals, which have included the introduction of authorised extra billing in their private and semi-private sectors, have made hospitalisation in these sectors as expensive as in private clinics. Hospitalisation in the private and semi-private sectors of public hospitals will therefore be reimbursed in the same way as hospitalisation in approved private hospitals in future, i.e. in accordance with the General Rule referred to in paragraph 2 above. However, hospitalisation in the public sector of public hospitals will continue to be reimbursed at the rate of 100%.

Hospitalisation in non-approved private hospitals will be reimbursed at the rate of 80% and the costs borne by the insured member will not be taken into account to qualify for one of the higher reimbursement rates set out in the table above.

In all cases, any supplements for a private one-bed ward will continue to be fully borne by the insured member as before.

4. The introduction of the General Rule means that henceforth ceilings will have to be expressed in terms of expenditure rather than in terms of reimbursement. By dividing the existing ceilings by 0.9, the same level of benefits will be maintained. In addition, in certain cases, it will be possible for the unused part of the ceiling to be carried over to future years.

o Benefits under the optics heading (spectacles and contact lenses) have been simplified: the reimbursement rates of the General Reimbursement Rule will apply, up to an annual ceiling of 500/CHF which can be cumulated over 3 years.

o Refractive surgery will be reimbursed in accordance with the General Reimbursement Rule, up to a ceiling of 2000 CHF per eye for the entire duration of membership of the CHIS. This benefit will be available only after at least one year of membership and will require prior authorisation by the Scheme's administrator (UNIQA).

o Expenditure on dental treatment will be reimbursed in accordance with the General Reimbursement Rule, up to an annual ceiling of 3300 CHF which can be cumulated over 3 years.

5. A bonus of 5 percentage points will be added to the reimbursement rate for outpatient expenditure (doctors' fees, pharmaceutical expenses, analyses and medical imaging, etc.) incurred in those CERN Member States where health care costs are the lowest. The list of these countries is given in Annex I of the CHIS Rules and will be updated every year, based on the health care costs published by the OECD.

The new CHIS Rules, which will enter into force on 1 January 2012, are available on the CERN website: www.cern.ch/chis

General questions or comments about these changes may be submitted to chis.info@cern.ch

Additional information is available:

- in the next issue of the CHIS Bull', which will be published before the end of the year, and which will explain the new measures through concrete examples.
- from the Scheme's administrator, UNIQA, for questions related to the application of the new rules to your personal situation (uniqa@cern.ch, tel. 72730).

HR Department

RESIDENCE IN SWITZERLAND OF PARTNERS OF MEMBERS OF THE PERSONNEL

1. Definitions

a) CERN Staff Rules and Regulations

Article S IV 1.02 of the Staff Rules defines a "partner", irrespective of gender, as "any person linked to an employed member of the personnel by a partnership officially registered in a Member State". Partners are regarded as family members for the purposes of protection against the financial consequences of illness and accidents.

b) Swiss Federal Law

Under Swiss federal law, to which the text below essentially refers, the following definitions apply:

- "partners": a couple of the same sex (linked by a registered partnership),
- "common-law spouses": a couple of the opposite sex (unmarried).

Provided that they are aged 18 or more and are not blood relatives, two people of the same sex ("partners") may officially register their partnership with the competent registry office in order to give it a legal framework (a civil partnership commonly known as the Federal PACS). Such partnerships are recognised by the Federal Department of Foreign Affairs (DFAE), as are partnerships validly registered outside Switzerland, as long as they have the same legal effect as partnerships registered in Switzerland. Marriages between persons of the same sex which take place outside Switzerland are considered as registered partnerships.

However, Swiss federal law does not define a special legal framework for partnerships between persons of the opposite sex (common-law spouses) and does not recognise such partnerships registered outside Switzerland.

N.B.: Geneva cantonal law provides for a form of partnership (a civil partnership commonly known as the Geneva PACS) open to same-sex and opposite-sex couples alike; while it is not recognised by the DFAE, it is recognised by CERN within the meaning of Article S IV 1.02 of the Staff Rules and Regulations.

2. Opposite-sex (common-law) partnerships

a) Staff Members and Fellows

The partner of a staff member or fellow will be issued with a DFAE legitimisation

card of the same type as the one issued to the staff member or fellow concerned, provided that:

- the couple is living together, and
- the partnership is recognised by CERN within the meaning of Article S IV 1.02 of the Staff Rules and Regulations.

If the partnership is not recognised by CERN, the Swiss authorities will, on an exceptional basis, issue an "H"-type DFAE legitimisation card, which does not confer any privileges or immunities, provided that the couple:

- is living together in Switzerland, and
- has had one or more children together, or is able to supply proof of a stable, long-standing relationship (e.g. a notarial deed or an official contract).

The Swiss authorities also issue legitimisation cards to the partner's children if they are unmarried and under 25 years of age; in the case of minors (children under 18 years of age), the partner must have legal custody.

b) Other members of the personnel

The Swiss authorities will, on an exceptional basis, issue an "H"-type DFAE legitimisation card, which does not confer any privileges or immunities, provided that the couple:

- is living together in Switzerland, and
- has had one or more children together or is able to supply proof of a stable, long-standing relationship (e.g. a notarial deed or an official contract).

The Swiss authorities also issue legitimisation cards to the partner's children if they are unmarried and under 25 years of age; in the case of minors (children under 18 years of age), the partner must have legal custody.

The application must be made through a detailed letter submitted by the Organization (Relations with the Host States Service) describing the specific circumstances. Persons who require a visa to reside in Switzerland must obtain a favourable response from the authorities regarding the issue of a legitimisation card before applying for their visa and coming to Switzerland.

3. Same-sex partnerships

a) Staff members and fellows who have officially registered their partnership

The partner of a staff member or fellow will

be issued with a DFAE legitimisation card of the same type as the one issued to the staff member or fellow, provided that:

- the couple is living together, and
- the partnership is recognised by CERN within the meaning of Article S IV 1.02 of the Staff Rules and Regulations, and
- the partnership is recognised by the DFAE (see paragraph 1.b below).

The Swiss authorities also issue legitimisation cards to the partner's children if they are unmarried and under 25 years of age; in the case of minors (children under 18 years of age), the partner must have legal custody.

b) Other members of the personnel

The Swiss authorities will, on an exceptional basis, issue an "H"-type DFAE legitimisation card, which does not confer any privileges or immunities, if the couple:

- is living together in Switzerland, and
- is able to supply proof of a stable, long-standing relationship (e.g. a notarial deed or an official contract) or of a partnership recognised by the DFAE.

The Swiss authorities also issue legitimisation cards to the partner's children if they are unmarried and under 25 years of age; in the case of minors (children under 18 years of age), the partner must have legal custody.

The application must be made through a detailed letter submitted by the Organization (Relations with the Host States Service) describing the specific circumstances. Persons who require a visa to reside in Switzerland must obtain a favourable response from the authorities regarding the issue of a legitimisation card before applying for their visa and coming to Switzerland.

*Human Resources Department
Services, Procedures & Social Affairs Group
Tel.: 79494 - cards.service@cern.ch*

*Relations with the Host States Service
Tel.: 72848 - relations.secretariat@cern.ch
www.cern.ch/relations*



Take note

DANISH FIRMS VISIT CERN

30 – 31 JANUARY 2012

09h00 to 17h00 Monday 30 January

09h00 to 17h00 Tuesday 31 January

Individual interviews will take place in technicians' offices. The firms will contact relevant users/technicians but any user wishing to make contact with a particular firm is welcome to use the contact details which are available from each secretariat of department or from the GS Department web pages at the following URL:

<http://gs-dep.web.cern.ch/en/content/Industrial-Exhibitions>

List of Companies:

- Axcon APS
- BB Electronics A/S
- B.Rustfrit Stal A/S
- CIM Industrial Systems A/S
- Danfysik A/S
- Develco A/S
- Eletronic A/S
- GPV Group
- Innaware A/S
- JLI Vision A/S
- NECAS A/S
- NKT Cables A/S
- Noliac A/S
- Röttger's Vaerktojs A/S

For further information please contact
Claudia Bruggmann Furlan GS-IS-LS
73312 or Caroline Laignel GS-DI 73722.

RESULTS OF THE ROUTE DE MEYRIN - CERN INTERNATIONAL COMPETITION

The Canton of Geneva and CERN have organised a competition to produce a design for the Organization's future reception areas adjacent to the Route de Meyrin.

The winners of the competition will be announced on 19 January 2012 and an exhibition of all the candidates' projects will be open to the public:

from 20 to 28 January on the first floor of the Globe of Science and Innovation.

Opening times: Monday to Saturday from 10 a.m. to 5 p.m.

**Route de Meyrin
CERN**

**exhi-
bition**

competition projects

20-28.01.2012

Globe of Science and Innovation
route de Meyrin 385, 1217 Meyrin
Tram 14, stop: CERN

Monday - Saturday: 10 a.m. - 5 p.m.





Take note

BULLETIN PUBLICATION SCHEDULE FOR 2012

The table below lists the 2012 publication dates for the paper version of the Bulletin and the corresponding deadlines for the submission of announcements. Please note that all announcements must be submitted by 12.00 noon on Tuesdays at the latest.

Bulletin No. Week number	Submission of announce- ments (before 12.00 midday)	Bulletin Web version	Bulletin Printed version
4-5	Tuesday 17 January	Fridays 20 and 27 January	Wednesday 25 January
6-7	Tuesday 31 January	Fridays 3 and 10 February	Wednesday 8 February
8-9	Tuesday 14 February	Fridays 17 and 24 February	Wednesday 22 February
10-11	Tuesday 28 February	Fridays 2 and 9 March	Wednesday 7 March
12-13	Tuesday 13 March	Fridays 16 and 23 March	Wednesday 21 March
14-15	Tuesday 27 March	Friday 30 March and Thursday 5 April	Wednesday 4 April
16-17	Tuesday 10 April	Fridays 13 and 20 April	Wednesday 18 April
18-19	Tuesday 24 April	Fridays 27 April and 4 May	Thursday 3 May
20-21	Tuesday 8 May	Fridays 11 and 18 May	Wednesday 16 May
22-23	Tuesday 23 May	Fridays 25 May and 1 June	Wednesday 30 May
24-25	Tuesday 5 June	Fridays 8 and 22 June	Wednesday 13 June
26-27	Tuesday 19 June	Fridays 22 and 29 June	Wednesday 27 June
28-29	Tuesday 3 July	Fridays 6 and 13 July	Wednesday 11 July
30-31	Tuesday 17 July	Fridays 20 and 27 July	Wednesday 25 July
32-33-34	Tuesday 31 July	Friday 3 August	Wednesday 8 August
35-36	Tuesday 21 August	Fridays 24 and 31 August	Wednesday 29 August
37-38	Tuesday 4 September	Monday 10 and Friday 14 September	Wednesday 12 September
39-40	Tuesday 18 September	Fridays 21 and 28 September	Wednesday 26 September
41-42	Tuesday 2 October	Fridays 5 and 12 October	Wednesday 10 October
43-44	Tuesday 16 October	Fridays 19 and 26 October	Wednesday 24 October
45-46	Tuesday 30 October	Fridays 2 and 9 November	Wednesday 7 November
47-48	Tuesday 13 November	Fridays 16 and 23 November	Wednesday 21 November
49-50	Tuesday 27 November	Fridays 30 November and 7 December	Wednesday 5 December
51-52/1-2-3	Tuesday 11 December	Friday 14 December	Wednesday 19 December

If you wish to publish a news article or an item in the General Information or Official News sections, please contact:

Bulletin-Editors@cern.ch

If you wish to publish an announcement in the Staff Association section, please contact:

Staff.Bulletin@cern.ch

Publications Section, DG-CO group



Take note

R.I.P. COMPUTER ANIMAL SHELTER



The Computer Mice shelter after the attack.

Due to a brutal and unjustified attack on our facilities in front of the CERN Computer Centre, we had to close the CERN Animal Shelter on 5/1/2012 after only 9 months of operation (the shelter was inaugurated on 1/4/2011). With deep sadness we look back to the old days when everything was fine. R.I.P.

All surviving mice have been returned to their owners, who have also been advised to "Stop --- Think --- Click" in order to securely browse the Internet and securely read e-mails. Users who have followed this recommendation in the past were less likely to have their computer infected or their computing account compromised. However, still too many users click on malicious web-links and put their computer and account at risk.

Thank you all for your support during the last 9 months.

The Computer Animal Shelter

HEALTH, HYGIENE AND SAFETY IN THE WORKPLACE AND THE MARS INTERVIEW

The MARS exercise provides a unique opportunity for exchange between staff members and their supervisors. It is also an opportunity to review workplace health, hygiene and safety issues, and in particular to identify occupational risks to which the staff member may be exposed. That information can also be used to identify and arrange for safety training, and to agree on the personal protective equipment that may be required.

CERN's Medical Service can use the identified occupational risks to verify that the state of health of each member of the personnel is compatible with the work assigned, which is one of the Service's responsibilities.

Part 4 of the 2012 MARS form ("Aspects related to health, safety and working conditions") will therefore have a new box, which should be checked to confirm that the staff member and the supervisor have identified occupational risks using form OHS 0-0-3. The safety courses should be listed under "Development objectives", and the personal protection equipment should be purchased from the CERN store.

Instructions for completing form OHS 0-0-3:

- Print the form out (use the link on the MARS form).
- Fill it out together (staff member and supervisor):
 - describe the staff member's work;
 - tick the boxes that are applicable to the staff member; and
 - date and sign the form (both staff member and supervisor).
- Send the form to the Medical Service, as indicated on the first page of the form.
- Check the corresponding box on the MARS form.

Form OHS 0-0-3 is an official EDH document for the forthcoming MARS exercise. Please send any suggestions for improving this document to safety-general@cern.ch.

François Angerand



External meeting

**Geneva university
Département de physique**

**24, quai Ernest-Ansermet
CH-1211 Genève 4**

Tél: (022) 379 62 73

Fax: (022) 379 69 92

Vendredi 17 février 2012

PARTICLE PHYSICS SEMINAR

at 17.00 hrs – Stückelberg Auditorium

New frontiers on photodetection

Dr Carla Aramo / INFN, Sezione di Napoli

In the last years the use of new materials and new technologies opened the door to new kind of devices based on the coupling of well known properties of silicon with properties of other materials. In particular carbon material, in the form of carbon nanotubes, has been used to create heterojunction with interesting photoconductivity characteristics. The new photodetectors obtained show to have peculiar and interesting characteristics with quantum efficiency ranging from >35% to >15% in the investigated wavelength interval from near infrared to near ultraviolet region. The device characteristics, the silicon-carbon nanotubes heterojunction and some future improvements towards single photon detection, medical imaging and nano-opto-electronics will be briefly illustrated.

Information : <http://dpnc.unige.ch/seminaire/annonce.html>

Organiser: Mrs Gabriella Pasztor



CERN TECHNICAL TRAINING: AVAILABLE PLACES IN FORTHCOMING COURSES

The following course sessions are scheduled in the framework of the 2012 CERN Technical Training Programme and places are still available. You can find the full updated Technical Training course programme in our web catalogue (<http://cta.cern.ch/cta2/f?p=110:9>).

Software and system technologies

Drupal in a Day	30/01/2012	30/01/2012	English
Object-Oriented Analysis and Design using UML	07/02/2012	09/02/2012	English
CERN openlab/Intel Computer Architecture and Performance Tuning Workshop	15/02/2012	16/02/2012	English
Python - Hands-on Introduction	20/02/2012	23/02/2012	English
ITIL Foundations (version 3)	22/02/2012	24/02/2012	English
Drupal Site Building	05/03/2012	06/03/2012	English
Joint PVSS-JCOP Framework	05/03/2012	09/03/2012	English
Oracle Database SQL Tuning	07/03/2012	09/03/2012	English
Oracle - SQL	12/03/2012	14/03/2012	English
ITIL Foundations (version 3) EXAMINATION	19/03/2012	19/03/2012	English
Object-oriented Design Patterns	19/03/2012	21/03/2012	English
Python: Advanced Hands-On	26/03/2012	29/03/2012	English

Electronic design

Altium Designer 6.0 - Foundation & Board Implementation	18/01/2012	27/01/2012	French
LabVIEW for beginners	23/01/2012	25/01/2012	English
LabVIEW for Experts	30/01/2012	03/02/2012	English

Mechanical design

ANSYS Workbench	06/02/2012	09/02/2012	English
Travailler en salle propre	27/02/2012	27/02/2012	French
ANSYS - Introduction to Classical ANSYS	28/02/2012	02/03/2012	French
ANSYS Workbench advanced	05/03/2012	08/03/2012	English
SmarTeam - Refresher	20/03/2012	20/03/2012	French
SmarTeam - CATIA data manager at CERN	21/03/2012	23/03/2012	French
Catia-Smartteam Basics	26/03/2012	20/04/2012	French

Office software

CERN EDMS - Introduction	18/01/2012	18/01/2012	French
CERN EDMS - Introduction	01/02/2012	01/02/2012	English
CERN EDMS for Local Administrators	23/01/2012	24/01/2012	French
Dreamweaver CS3 - Niveau 1	15/03/2012	16/03/2012	French
ECDL: European Computing Driving Licence Certification	10/02/2012	10/02/2012	Bilingual
ECDL: European Computing Driving Licence Certification	30/03/2012	30/03/2012	Bilingual
Egroups training	16/03/2012	16/03/2012	English
EXCEL 2007 - level 1 : ECDL	30/01/2012	31/01/2012	French
EXCEL 2007 - level 1 : ECDL	26/03/2012	27/03/2012	English
EXCEL 2007 - Level 2: ECDL	27/02/2012	28/02/2012	French
Expression Web - Level 1 (former Sharepoint Designer or Frontpage)	02/02/2012	03/02/2012	English
Expression Web - Level 2 (former Sharepoint Designer or Frontpage)	05/03/2012	06/03/2012	English
Indico Advanced - Conference Organization	09/02/2012	09/02/2012	English
Indico for beginners - Meeting Organization	09/02/2012	09/02/2012	English
Individual Coaching	27/01/2012	27/01/2012	Bilingual
Novelties Sharepoint Collaboration Workspace 2010	26/01/2012	26/01/2012	French
Novelties Sharepoint Collaboration Workspace 2010	12/03/2012	12/03/2012	French
PowerPoint 2007 - Level 1: ECDL	06/02/2012	07/02/2012	English
PowerPoint 2007 - Level 1: ECDL	29/03/2012	30/03/2012	French
Project Planning with MS-Project	26/03/2012	30/03/2012	English
Sharepoint Collaboration Workspace - Level 1	09/02/2012	10/02/2012	English
Sharepoint Collaboration Workspace - Level 1	01/03/2012	02/03/2012	French
Sharepoint Collaboration Workspace - Level 2	19/03/2012	20/03/2012	French



Technical training

Marie-Laure LECOQ 74924
ENSEIGNEMENT TECHNIQUE
TECHNICAL TRAINING
technical.training@cern.ch

Office software

Vidyo - Hands on Overview	20/01/2012	20/01/2012	French
Windows 7	27/01/2012	27/01/2012	French
WORD 2007 - level 1 : ECDL	08/03/2012	09/03/2012	French
WORD 2007 - level 2 : ECDL	23/01/2012	24/01/2012	French

Special course

AXEL: Introduction to Particle Accelerators	16/01/2012	20/01/2012	English
---	------------	------------	---------

If you are interested in attending any of the above course sessions, please talk to your supervisor and/or your DTO, and apply electronically via EDH from the course description pages that can be found at: <http://cta.cern.ch/cta2/f?p=110:9> under 'Technical Training' with the detailed course program. Registration for all courses is always open – sessions for the less-requested courses are organized on a demand-basis only. CERN Technical Training courses are open only to members of the CERN personnel (staff members and fellows, associates, students, users, project associates, apprentices and employees of CERN contractors, with some restrictions). In particular, quoted prices and programmes refer specifically to the CERN community.

Marie-Laure LECOQ 74924
ENSEIGNEMENT TECHNIQUE
TECHNICAL TRAINING
technical.training@cern.ch



Technical training



Language training

NOVELTIES ON SHAREPOINT COLLABORATION WORKSPACE:

Your Sharepoint Collaboration workspaces will have to migrate to the new Sharepoint 2010 version.

As soon as you will create a new site or subsite within your own site or as soon as you will click on "Update my site", you will be forced to migrate to Sharepoint 2010.

In order to anticipate these changes, the technical training invites you to discover all the new features of this interface in a new one day course called "Novelties on Sharepoint Collaboration Workspace 2010".

To sign in, please click on our training catalogue.

ENGLISH COURSE

Oral Expression:

The next sessions will take place from 27th of February to 22nd of June 2012.

This course is intended for people with a good knowledge of English who want to enhance their speaking skills.

There will be on average of 8 participants in a class.

Speaking activities will include discussions, meeting simulations, role-plays etc. depending on the needs of the students.

For registration and further information on the courses, please consult our Web pages:

<http://cern.ch/Training> or contact Kerstin Fuhrmeister, tel. 70896.

Writing Professional Documents in English - Administrative

Writing Professional Documents in English - Technical

The next sessions will take place from 27th of February to 22nd of June 2012.

These courses are designed for people with a good level of spoken English who wish to improve their writing skills.

There will be an average of 8 participants in a class.

For registration and further information on the courses, please consult our Web pages or contact Kerstin Fuhrmeister, tel. 70896.

For registration and further information on these courses, please consult our Web pages: <http://cern.ch/Training> or contact Kerstin Fuhrmeister: Tel. 70896.



MONDAY 23 JANUARY

SPECIAL SEMINAR

16:30 - Council Chamber, Bldg. 503

Decoherent Histories Quantum Mechanics with One Real Fine-grained History - M. GELL-MANN

TUESDAY 24 JANUARY

TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

The global gravitational anomaly of the self-dual field theory

S. MONNIER / LPTENS PARIS

WEDNESDAY 25 JANUARY

TH THEORETICAL SEMINAR

14:00 - TH Auditorium, Bldg. 4

Three ways across the wall

B. SAMUEL PIOLINE / CERN

THURSDAY 26 JANUARY

CERN HEAVY ION FORUM

10:00 - TH Auditorium, Bldg. 4

Recent results from hHKM model: radial, elliptic flows and interferometry at RHIC and LHC

I. KARPENKO / BOGOLYUBOV INSTITUTE FOR THEORETICAL PHYSICS

A&T SEMINAR

14:15 - BE Auditorium, Bldg. 6

A future CLIC e+e- collider - the challenge of building a detector

K. ELSENER / CERN

FRIDAY 27 JANUARY

DETECTOR SEMINAR

11:00 - Bldg. 40 S2-A01 Salle Anderson

Status of the ATLAS Insertable B-Layer Construction

H. PERNEGGER / CERN

PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - TH Auditorium, Bldg. 4

Higgs boson mass bounds in the presence of a strongly coupled fourth generation

J. MERRITT BULAVA / CERN

TUESDAY 31 JANUARY

TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

New vacua from M-theory reductions

G. DALL'AGATA (INFN PADOVA)

WEDNESDAY 1 FEBRUARY

INTC MEETING

08:30 - Council Chamber, Bldg. 503

42nd Meeting of the INTC

TH COSMO COFFEE

11:00 - TH Auditorium, Bldg. 4

CMB constraints on annihilating GeV-scale Dark Matter

A. HEKTOR / NICPB TALLINN & CERN

FRIDAY 3 FEBRUARY

PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - TH Auditorium, Bldg. 4

From trees to two loops by maximal unitarity

K LARSEN (UPPSALA AND SACLAY)

Workshop "Chamonix 2012"

Wednesday 15 February 2012

14 :00 hrs – Main Auditorium

Summary of the LHC Performance
Workshop "Chamonix 2012"