



CERN Bulletin

Nos 21-22 | 20-27 May 2013

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Keeping the LHC in power



The new UPS installations.

The critical safety equipment around the LHC, including the machine protection systems, is connected to Uninterruptible Power Supplies (UPS). In case of mains failure, the UPS systems continue to power, for a limited time, these critical systems and ensure a safe shutdown of the accelerator. This week, work began to upgrade and replace over 100 UPS systems in the LHC.

For the LHC, even a perturbation on the mains is more than just an inconvenience: it often results in beam dumps and, in some cases, requires an energy extraction from superconducting circuits. When this occurs, machine protection systems, and in particular the Quench Protection System, must remain active to correctly carry out the shutdown procedure. With the UPS systems, 10 minutes of crucial power can be provided to the protection systems during this critical phase.

There are currently two UPS systems in place in each one of the 32 LHC UPS zones.

Originally one was used as a backup if the first system were to fail. Then, in 2009, a major upgrade on the UPS distribution was made in order to provide two independent and redundant power paths for the machine protection systems. "Redundant powering is the best solution for machine protection but in the present configuration, a failure of one of the UPS systems obliges us to shut down the accelerator," explains Vincent Chareyre, Project Leader for the replacement of the UPS systems.

The Electrical Engineering Group (EN-EL) will first replace the existing UPS systems with new ones based on a more robust technology. But also, an additional UPS system will be added to each zone. This

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A word from the DG

New awards for CERN science

Earlier this week, the European Physical Society (EPS) announced its High Energy and Particle Physics prizes for 2013, and I'm pleased to say that the LHC featured highly. With all that has been happening in the last few years, that's perhaps not too surprising, but these awards nevertheless constitute a great honour for our community.

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New awards for CERN science

The High Energy and Particle Physics Prize went to the ATLAS and CMS collaborations "for the discovery of a Higgs boson, as predicted by the Brout-Englert-Higgs mechanism", and to Michel Della Negra, Peter Jenni and Tejinder Virdee "for their pioneering and outstanding leadership roles in the making of the ATLAS and CMS experiments".

Among the other awards, the Young Experimental Physicist Prize went to Diego Martinez Santos "for his outstanding contributions to the trigger and commissioning of the LHCb experiment, and the analyses leading to first evidence for the rare decay $B_s^0 \rightarrow \mu^+\mu^-$ ", while the Outreach Prize went outside Europe for the first time, to Don Lincoln of Fermilab, "for communicating in multiple media the excitement of High Energy Physics to high-school students and teachers, and the public at large".

The awards were completed by the Giuseppe and Vanna Cocconi Prize, which recognizes outstanding achievement in astrophysics and cosmology, and was awarded to Art McDonald and Yoichiro Suzuki "for their outstanding contributions to the solution of the solar neutrino puzzle by measuring the flux of all neutrino flavours from the Sun with the SNO and Super-Kamiokande experiments", and the Gribov Medal, which went to Zohar Komargodski "for his deep insights into the structure of the renormalization group in four-dimensional field theories and, in particular, his proof (with Adam Schwimmer) of the a-theorem".

All the awards will be presented during the EPS-HEP conference in Stockholm in July. In the meantime, I hope you will join me in offering warm congratulations to all the recipients.

Rolf Heuer

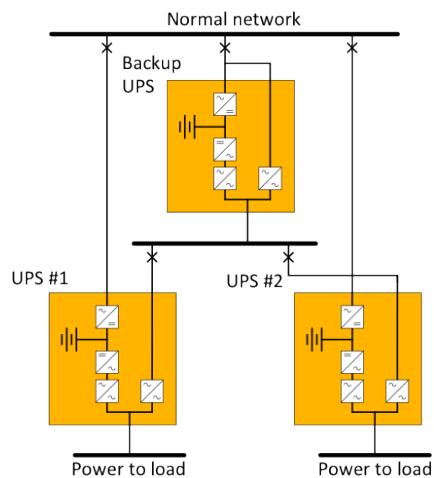
Keeping the LHC in power

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third UPS system will act as a backup for the two UPS systems on the front line.

As Vincent Chareyre explains: "With the three-system layout in each one of the zones, the failure of a single UPS system will be invisible for the machine protection systems. The LHC will continue to run thus minimizing time lost for physics."

During LS1, around 170 UPS systems with their batteries will be installed. As most of these are used for the LHC, there is an additional logistical challenge to the operation. "Most of the UPS zones are located underground," says Vincent Chareyre. "We will have to move more than 80 tons of electronics and more than 280 tons of batteries." The operation will take over one year to complete, and will involve external contractors as well as members of the EN-EL Group.



The new three-system layout for the UPS systems at each zone.

CERN Bulletin

A breath of fresh air!

During LS1 the teams in charge of the cooling and ventilation systems of the CERN accelerators will perform maintenance work on all the equipment for which they are responsible. What with replacing complete systems, making improvements or bringing equipment back up to scratch, their workload looks like being a heavy one over the coming months.

CERN's Cooling and Ventilation (CV) Group is responsible for the operation and maintenance of the cooling systems, pumping stations, air-conditioning facilities and fluid distribution systems for CERN's Computer Centre, the PS, the SPS, the LHC and their respective experiment areas. All these systems are equally indispensable and their maintenance is far from being a straightforward operation. During operating periods, the technical stops are too short for any major maintenance work. Although the work takes only a few days, such operations have an impact of several weeks on the schedules of all the downstream installations and especially on the cryogenics.

This is why LS1, which is a period of intense activity for all CERN teams working on the accelerators, is also a crucial time for the CV Group. "During this long technical shutdown we have to bring all the equipment, on which no maintenance interventions have been possible for three years, back up to scratch and prepare it for three further

years of non-stop operation," underlines deputy CV group leader Serge Deleval who is in charge of the work. "To achieve this gargantuan task, our teams have been reinforced: some 60 contractors, under the watchful eye of 15 CERN staff members, will be performing operations in parallel until the machines start up once again." In addition, some of the equipment will be consolidated to allow more regular maintenance. At Points 4, 6 and 8 of the LHC, for instance, the CV Group has installed new cooling towers to take over from the main cooling towers when the latter are being maintained. It is worth remembering that, in parallel to this maintenance work, many systems for which the CV Group are responsible will continue to function just as they do in a period of operation with beam. This is for safety reasons and to allow other groups to test and install their equipment during LS1.

Most of the cooling and ventilation equipment dates back to the commissioning of the accelerators and many items are

A breath of fresh air!

(Continued from page 2)

beginning to show their age. The PS ventilation systems, for instance, date back to 1957 and will be completely replaced to guarantee operational reliability and to meet new safety standards. "Once current operations to eliminate asbestos from the PS tunnel and galleries have been completed, an entirely new ventilation system will be installed with a much more efficient capacity for smoke removal and, above all, for ventilation of the radioactive areas," adds Serge Deleval. On the Meyrin site, the demineralised water production plant for all the CERN sites will be substantially upgraded and the oldest part dismantled to increase the plant's reliability.

The underground water pumping system will also be replaced at Point 3 of the LHC. "This area is particularly critical for the LHC infrastructure since it intersects with an underground river," explains Serge Deleval. "The river water pumps have to operate continuously, otherwise the tunnel would rapidly flood." The new more powerful pumps, of a type that is used in mines, will be able to remove sediments carried by the river water as well as the water itself. This will avoid the CV Group periodically having to clean the pumping area of sediments, entailing the shutdown of the LHC, as is currently the case.

Anaïs Schaeffer



Installing a fan in a cooling tower at Point 6 of the LHC in 2009. A similar exercise will be carried out in a few weeks.

LS1 Report: It's summer in the tunnel

A major milestone was passed this week at the PS Booster, where the first Personnel Access Door (PAD) of the new PS Complex access system is now operational. The new Material Access Door will follow very shortly.

In the LHC, another significant milestone should be reached by the end of this week, when all 8 sectors will be fully warmed up to room temperature for the first time since the start of the LHC commissioning over 5 years ago. At the moment, the final QPS (Quench Protection System) tests are in progress in sector 7-8 and the ELQA measurements continue in sector 1-2.

As for the SMACC project, the highly symbolic re-welding of the first interconnect in sector 5-6 was completed last week. The full programme will not get up to speed for another few weeks, but this demonstrates that the personnel, working methods and equipment are in place and ready. Concerning the R2E mitigation project, work continues disconnecting the racks around point 7, which will move into UJ76.

Preparations for the major irradiated cable campaign are continuing at the SPS. Although this work does not start until the autumn, preparation for the works must be completed well in advance to ensure that the proposed planning and working methods meet the ALARA (As Low As Reasonably Achievable) goals to minimize the radiation dose taken by all those people involved in the campaign. Removal of the beamline equipment in TT10 will also



SMACC project technician opened the busbar lines in the interconnections, giving access to the splices to be consolidated.

start this week, to prepare for some major repairs to the tunnel floor and ceiling.

In the PS tunnel, the asbestos removal programme at stations 6 and 8 as well as the galleries 1 and 3 is complete, and the civil engineering works to prepare for the new installations have started, on schedule. Preparatory work for the asbestos removal is starting in the galleries 5 and 7. Because of the shielding re-enforcement at Route

Goward, access to the central ring area of the PS for private cars is still forbidden and essential material deliveries are restricted to a small temporary road until July.

Simon Baird

CERN in "Nature"

CERN is nestled within a verdant natural environment which, thanks to a conservation-oriented policy, is characterized by a remarkable biodiversity. The continued protection of that diversity calls for thoughtful, carefully planned measures.



CERN's site is an extensive one: its 650 hectares include 210 hectares of buildings, roadways and parking lots, 100 hectares of fenced-off green area, and 340 hectares of non-fenced land, a patchwork of fields, woods and pasture. This land teems with a great variety of plants and animals, including some rare and unexpected species. In 2009 CERN received a certificate from the Swiss foundation Nature & économie for the Meyrin site, and the award was renewed in 2012 for three more years.

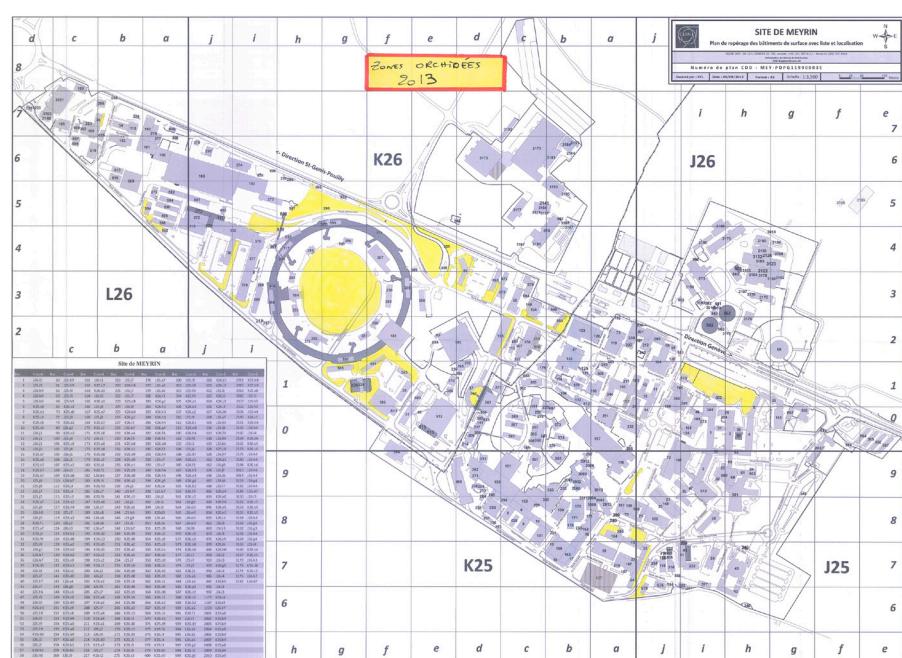
"The green spaces inside the fenced area are tended by six ISS gardeners, whose duties also include keeping the sidewalks and footpaths clear of snow in winter. The Meyrin site also includes orchid sanctuaries, meadows and sheep pastures. Around twenty orchid areas have been identified (see the map below), covering approximately 3 hectares in all, making our site one of the richest in the entire canton, counting no fewer than 19 different species," explains Mathieu Fontaine, who is in charge of managing the green spaces at CERN (GS Department).

CERN has been involved in efforts to protect and conserve natural habitats and the rural environment since the 1970s. Thus, an area of 260 hectares has been parcelled out for use by 15 different farmers, and herds of sheep are allowed to graze on its natural pastures (4 hectares of pasture on the Meyrin site and 22 on the Prévessin site). "The meadows and natural pastures are good for animals—Insects, birds, small mammals and reptiles—and plants. So they are clearly a good thing in terms of preserving biodiversity," underlines Mathieu Fontaine. "Our woods are a home for red deer, roe deer and wild boar. We even have a resident herd of 13 fallow deer on the Prévessin site."

In 1996 CERN signed a convention with the French forest authority, the Office national des forêts or ONF; the Convention, which was renewed in 2010, concerns the management and conservation of CERN's woods and measures to protect and preserve the banks of the Lion stream. The woods belonging to CERN are home to many species of tree: oak, ash, wild cherry, hazel and hawthorn. The terms of the convention have been broadened to allow the ONF to start an inventory of the trees on the Prévessin site to determine the size, composition and state of health of the tree population. Cut wood is provided to the Pays de Gex community of municipalities as biomass for power generation. CERN's forests are among the last bastions of natural woodland in the Pays de Gex plain, so they are of particular significance in terms of conservation.

Concerns about safety on the site made it necessary to cut down those trees that had become a hazard. Two thirds of the trees in a dangerous state were cut down in two campaigns that ran from 2010 to 2013, and the remaining third will be cut down during the winter of 2013-14. Restoration work will begin within the next few weeks (depending on the weather), starting with the lots situated alongside the Bloch, Bakker and Salam roadways. Planting of trees, shrubs, grasses, perennials and so on will begin in the autumn, as will the construction of footpaths. The orchid sanctuaries will be preserved, and parcels will be set aside as lawns and meadows. All of this will contribute to a complete rethink of the approach to landscaping at CERN.

CERN Bulletin



Stay Fit - Have Fun - Bike To Work

This June, CERN will take part in the Swiss "Bike to Work" campaign once again. In this Swiss national campaign, which has attracted more than 50,000 participants, teams of four colleagues encourage each other to cycle to work throughout the month of June.

Participating is easy! Simply get together with three of your colleagues and register your Bike to Work team online (at www.biketowork.ch/) before 31 May. There are no fees for registering teams, there is no minimum distance, and parts of the journey can be done using public transport. There is even an opening for non-cyclists: one member per team can be a pedestrian or a skateboarder or use any other means of transport that does not depend on an engine.

In addition to the June event, CERN is also supporting "Bike to CERN through the year" - an "unofficial" Bike to Work event. There were several prizes to be won last year, which were handed out at a recent ceremony, and a diploma was given to all contestants based on our very specific karma levels. We hope to get sponsors for prizes next year too, but in any case we can promise more karma to come your way!

Cycling is going mainstream! We encourage you to get in on the trend and join teams to take part in both the "Bike to Work" and the "Bike to CERN through the year" events.

Jens Vigen, CERN coordinator for Bike2Work

Prizes

Each participant will receive a CERN bicycle seat cover, custom made for the event. As if this weren't enough, there are also prizes up for grabs for participants who cycle at least every other day. There are 20 working days in June, which means that only 10 days on your bike will be enough to take part in the prize tombola.



Participants of the "2012 Bike2CERN through the year" campaign - with the campaign winners, Tim Smith, Martial Dujardin and Mika Huhtinen - alongside the organisers and cycling enthusiasts.

Learn more about "Bike to Work"

Joining a team

If you are looking for a team or members to complete your team, check out the Bike to Work website.

Previous Participants

If you took part in last year's Bike2Work campaign, you are encouraged to split your previous team into two. This way we will have double the number of teams participating this year compared to last year.

Safety

There are obviously risks related to the use of bicycles and everybody, whether a pedestrian, a cyclist or a driver, is responsible for reducing them. For those of you who are not

regular bike users, you have until June to acquire the standard safety equipment. The HSE Unit is also on hand to advise you and to increase your awareness of safety issues. Remember that the route you usually take by car is not necessarily the shortest or safest route when you cycle. Information on cycle routes in the Geneva area can be found [here](#).

On a practical note...

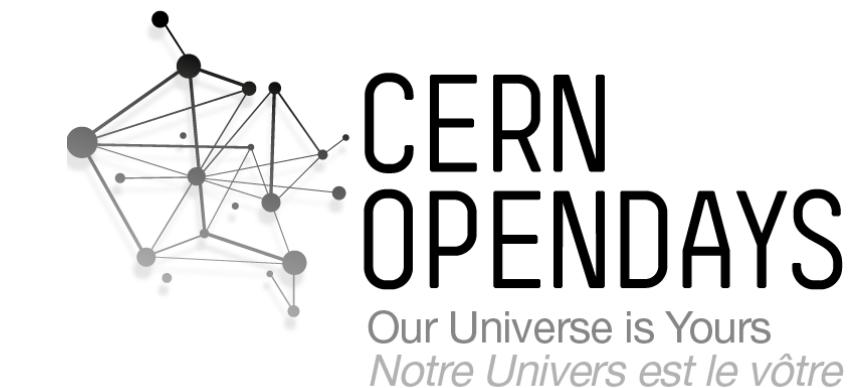
Fear of arriving at work all hot and sweaty is no excuse! There are shower facilities for men and women in the Pump Room (Building 216) and on the ground floor of Building 5.

Volunteers: the key that opens the doors for the Open Days

2013: the year that CERN opens its doors to the public. 2013 is also the approximate number of volunteers needed to ensure that these Open Days (JPO) go ahead smoothly. Whatever your personnel status and function, you, the volunteers, are the key without which the Laboratory's doors could not really open. Sign up now!

1,500 of you volunteered for the LHC2008 open days to mark the inauguration of the LHC. This year, with roughly 20% more visitors expected across the CERN sites over the two days, the organisers envisage closer to 2,000 volunteers. "We will be holding a wide variety of activities across the Laboratory's various sites," explains Virginie Blondeau, the member of the Open Days organising team in charge of recruiting and training volunteers. "As well as guides for the experiments, we will also need volunteers to welcome and direct visitors, to help with logistics and to man the sales points, etc."

The volunteers will receive training tailored to their role and, as with all Open Days, as well as having the satisfaction of being able to say "I was there!", they will be given exclusive JPO2013-branded clothing. Of course, they will also be provided with packed lunches and drinks. "We will look after our volunteers so that they can really enjoy taking part in the Open Days,"



Virginie assured us. "However, they won't receive any additional leave or time off in lieu as this remains a voluntary activity."

These unique few days will see the doors opened wider than ever before and you, the volunteers, are the key to all these events. The online sign-up is now ready

and the organisers are hoping that a large number of people will volunteer straight away so that they have plenty of time to organise the troops and assign roles according to preferences and needs (descriptions of the roles can be found on the website). So what are you waiting for? Visit www.cern.ch/OD2013/volunteers today!

Antonella Del Rosso

State-of-the-art technology for an extended computing centre

On 7 May, CERN's Director-General, Rolf Heuer, the Director for Research and Computing, Sergio Bertolucci, the EN Department Head, Roberto Saban, and several guests joined the IT Department Head, Frédéric Hemmer, for the inauguration of the new facilities at the CERN Computing Centre.



One of the new ventilation units and a big duct, installed as part of the Computing Centre consolidation project.

After nearly two years of work, the IT Department now boasts a new computer room, equipped with its own cooling system to house the Computing Centre's critical IT systems, which can, from now on, be decoupled from the other systems in the building. New electrical facilities have been added too, boosting the Centre's computing power from 2.9 to 3.5 MW. Finally, an additional 40 cubic-metre water tank has been installed to allow continued cooling of the IT systems in the event of a major incident.

But the star attraction of the extension project has to be the new computing room itself. With a surface area of 200 m², the room is equipped with 90 racks capable of supporting up to 450 kW of IT equipment. These state-of-the-art new devices, known as "passive racks", are water-cooled to ensure more effective and reliable cooling in the event of a power cut. Similarly, if the mains power fails, the servers in the new room will continue to receive power from uninterruptible power supplies and then from diesel generators (if the outage persists).

Anaïs Schaeffer

CAS Accelerator Physics held in Erice, Italy

The CERN Accelerator School (CAS) recently organised a specialised course on Superconductivity for Accelerators, held at the Ettore Majorana Foundation and Centre for Scientific Culture in Erice, Italy from 24 April-4 May, 2013.

Following a handful of summary lectures on accelerator physics and the fundamental processes of superconductivity, the course covered a wide range of topics related to superconductivity and highlighted the latest developments in the field. Realistic case studies and topical seminars completed the programme.

The school was very successful with 94 participants representing 23 nationalities, coming from countries as far away as Belorussia, Canada, China, India, Japan and the United States (for the first time a young Ethiopian lady, studying in Germany, attended this course). The programme comprised 35 lectures, 3 seminars and 7 hours of case study. The case studies were pursued with great enthusiasm and produced some excellent results.

Feedback from the participants was positive, reflecting the high standard of the lectures.



Photo courtesy of Alessandro Noto, Ettore Majorana Foundation and Centre for Scientific Culture.

In addition to the academic programme, the participants had the opportunity to take part in a one-day excursion to visit the Museum of the Nave Punica in Marsala, and the Greek temple and Hellenistic theatre at Segesta.

The next CAS course will be held in Trondheim, Norway from 18-29 August, 2013 and will be at the advanced level. Further information on forthcoming CAS courses can be found on the CAS website.

CERN Accelerator School



Jekyll or Hyde? Better browse securely

Surfing the web is like walking through London in 1886. Usually you meet nice Dr Jekyll, interact with him and everything is fine. But at other times, at night, you might encounter the malicious Mr Hyde. He just wants your money and your secrets, and wants to take advantage of you.

As in the novel by Stevenson, good and bad web pages can be very close together. Most web pages exist to provide information or a service. But one click away, one Google page down, there are malicious web pages that aim to steal your password, infect your computer, or lure you into disclosing personal information.

So remember: "STOP - THINK - CLICK!" should be the standard when browsing the Internet. If you are presented with a link that looks strange or contains gibberish (like <http://211.268.156.277/>.PayPal/cgi-bin/wbsrcmd_login.php), just ignore it! It is always better to type simple,

comprehensible web addresses like "www.paypal.com" than clicking on obscure links. If you are asked for your password, be vigilant and think about whether this is justified (and do not use your CERN password on other sites!). Also, first check whether or not the connection is secure, i.e. that the web address starts with "https" and not just with "http" without the "s". Otherwise, private correspondence and passwords can be intercepted by a malicious third party.

Also take care when typing a web address. "CERN.CH" is of course not malicious, but just one typo away and you might accidentally enter "CERN.CG", "ERN.CH" or "XERN.CH".

These are not under our control. Many companies have bought those so-called "Doppelgängerdomains" or "typodomains". At CERN, we have blocked the obvious ones in the CERN domain name server, so you will not be able to visit them from CERN. But at home, be vigilant!

For further information, please check our website or contact us at Computer.Security@cern.ch.

Computer Security Team



Gate E to the Meyrin site - Reminder

International agreements have been concluded between CERN, Switzerland and France concerning Gate E («Charles de Gaulle Gate») aimed at reducing congestion at the Prévessin-RN84 and Route de Meyrin customs posts.

On the basis of these agreements, the Director-General has issued Rules for the use of Gate E (see this document, available on the Relations with the Host States website), which includes the following provisions:

- a) Gate E is open from Monday to Friday, except on official CERN holidays, from 7.00 a.m. to 9.30 a.m. for access to the site, and from 4.30 p.m. to 7.00 p.m. for departure from the site.
- b) The following persons are authorised to use Gate E:

- members of the CERN personnel (who may be accompanied by any of their children attending the CERN nursery school),
- members of contractors' personnel working on the CERN site.

These persons must be in possession of the following three documents:

- their CERN access card of the Blue "C" type or Red "E" type proving that they are authorised to use Gate E,
- their national identity card, if accepted by French and Swiss regulations, or their passport (with visa if required by the French and/or Swiss regulations),
- their French residence permit if they live on French territory and are not nationals of Switzerland or a Member State of the European Union (e.g. a special French AT, FI or CD card issued by the French Ministry of Foreign and European Affairs).

- c) All persons using Gate E must present their CERN access card to the Guard on duty without being prompted, and wait until he specifically authorises them to pass.

- d) Only personal effects that are not subject to a customs declaration may be transported (cf. websites of the Swiss and French customs, e.g. here).

- e) Persons are authorised to use Gate E exclusively for the purposes of travelling to work on the Meyrin Site from French territory and vice versa (it is strictly forbidden to use Gate E in order to gain access to the

territories of the Host States outside the boundaries of the CERN site).

*Relations with the Host States Service
<http://www.cern.ch/relations/>
relations.secretariat@cern.ch*

Tel.: 72848

Taxation in France | Memorandum concerning the annual internal taxation certificate and the declaration of income for 2012

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

I - Annual internal taxation certificate for 2012

The annual certificate of internal taxation for 2012, issued by the Finance, Procurement and Knowledge Transfer Department, is available since 15 February 2013. It is intended exclusively for the tax authorities.

1. If you are currently a member of the CERN personnel you received an e-mail containing a link to your annual certificate, which you can print out if necessary.
2. If you are no longer a member of the CERN personnel or are unable to access your annual certificate as indicated above, you will find information explaining how to obtain one at this link.

In case of difficulty in obtaining your annual certificate, send an e-mail explaining the problem to helpdesk@cern.ch.

II - 2012 income tax declaration form in France

The 2012 income tax declaration form must be completed in accordance with the indications available at the following address: https://cern.ch/admin-eguide/Impots/proc_impot_decl-fr.asp.

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

This information does not concern CERN

pensioners, as they are no longer members of the CERN personnel and are therefore subject to the standard national legal provisions relating to taxation.

Tax declaration: for the attention of members of the personnel and pensioners living in France

Exchange rate for 2012
For 2012, the average annual exchange rate is EUR 0.83 for CHF 1.

*Human Resources Department
Contact: 73903*



Incivility on the road: this may also affect you!

We all have to act in a more respectful and careful manner towards each other, and this also applies on the road. We therefore have to pay particular attention to the most vulnerable people (cyclists, pedestrians, etc.).

A couple of articles were published on the issue to raise awareness among drivers on the importance of road safety rules. Incivilities such as vehicles parked in a hazardous way, right of way violations, etc. can cause serious accidents with physical and/or material consequences.

In compliance with the 2013 road safety goal, presented earlier this year by CERN's Director-General, incivilities reported in the A2 Form will, from now on, be systematically followed up, as stated in the procedure set up by the HSE Unit in collaboration with the GS Department. The follow-up process puts special emphasis on prevention, as it is mainly a reminder of CERN traffic regulations. Nevertheless, those who violate it can also be subjected to sanctions, as stated in paragraph 26 of Operational Circular No. 2.

Please remember that, in accordance with paragraph 4, "Responsibility and Authority" of A7 Code "Road Traffic at CERN", the representative of the Reception and Access Control Service has the right to report anyone who commits incivilities on the road to their supervisor.

HSE Unit



Take note

Conference | From Newton to Hawking and beyond | 28 May

From Newton to Hawking and beyond: Why disability equality is relevant to the world of particle physics, Dr Tom Shakespeare.

**Tuesday 28 May – 11.30 a.m. - 1 p.m.
Main Auditorium – Room 500-1-001**

Conference organised by the CERN Diversity Programme - Conference in English with French interpretation

According to the recent world report on disability, 15% of the world's population is disabled. Among that group could be numbered famous physicists such as Isaac Newton and Paul Dirac, neither of whom could be classed as "neuro-typical", and Stephen Hawking. This presentation will provide some basic data about global disability, and the socially imposed barriers which disabled people face. It will also include some stories about high achieving people with disabilities. Finally, some practical suggestions will be offered on how to respect and include people with disabilities in the workplace.

Tom Shakespeare is a social scientist and ethicist with 25 years' experience with the disability movement, including time working in disability arts and delivering disability

equality training. He has published and broadcast widely, and authors a popular blog on disability history at disabledlives.blogspot.com, as well as the monthly column Die Andere Sicht in NZZ Folio magazine. Between 2008 and 2013, Tom worked in the Disability and Rehabilitation team at the World Health Organization, Geneva. He currently teaches medical sociology at the University of East Anglia Medical School in Norwich, UK.

Université de Genève | Séminaire de physique corpusculaire | 29 May

*AMS – First results, Dr Mercedes Paniccia,
Université de Genève.*

**Wednesday 29 May - 11:15 a.m.
Science III, Auditorie 1S081
30, quai Ernest-Ansermet, 1211 Genève 4**

CERN RECITAL
ARIAS and ART SONGS

*Schumann
Tchaikovsky
Mozart
Ravel
Verdi*

**Hubert Niewiadomski – baritone
Verena Matschke – piano**

28 May, Tuesday, 2013, 19:30

CERN, Main Auditorium
Free entrance

CERN



Management & Communication training

Management and communication courses – Places available

There are places available in some management and communication courses taking place in the period April to June 2013. For advice, you can contact Erwin Mosselmans (tel. 74125, erwin.mosselmans@cern.ch) or Nathalie Dumeaux (tel. 78144, nathalie.dumeaux@cern.ch)

Course in English (or bilingual)	Dates	Duration	Language	Availability
Managing stress	29 and 30 May	2 days	English	3 places
Making Presentations	30, 31 May & 25 June	3 days	English	2 places
Communicating Effectively - Residential course	4 to 6 June	3 days	Bilingual	9 places
Handling difficult conversations (Adapted from Dealing with Conflict)	7 and 14 June and 13 September	3 days	English	6 places
Voice and Nonverbal Behaviour in Speech Communication	17 and 18 June	1 day 4 hours	English	7 places
Managing Teams	18 to 20 June	3 days	English	3 places
Quality Management	08 to 9 July	2 days	English	8 places
Cours en français				
Savoir gérer les discussions difficiles	15 et 22 mai et 26 juin	3 jours	Français	9 places
Les enjeux de la voix et du comportement non verbal dans la communication orale	21 au 22 mai	1 jour 4 heures	Français	5 places
Communiquer pour convaincre	28, 29 mai	2 jours	Français	7 places
Gestion du stress	5 et 6 juin	2 jours	Français	2 places



Technical training

Electronics design	Next Session	Duration	Language	Availability
Altium Designer: Essentials	04-Jun-13 to 07-Jun-13	4 days	English	10 places available
Altium Designer: Front End Specialist (Advanced)	23-Sep-13 to 24-Sep-13	2 days	English	10 places available
Altium Designer: PCB Specialist (Advanced)	25-Sep-13 to 27-Sep-13	3 days	English	6 places available
CAO = Allegro Design Entry HDL Front-to-Back Flow v16.6	04-Jun-13 to 06-Jun-13	3 days	English	5 places available
DIADEM - basics	01-Jul-13 to 03-Jul-13	3 days	French	8 places available
Expert VHDL for FPGA Design	25-Nov-13 to 29-Nov-13	5 days	English	7 places available
Introduction to VHDL	10-Jul-13 to 11-Jul-13	2 days	English	3 places available
LabVIEW for Experts	08-Jul-13 to 12-Jul-13	5 days	English	7 places available
LabVIEW for beginners	12-Jun-13 to 14-Jun-13	3 days	English	7 places available
Siemens - STEP7 : level 2	10-Jun-13 to 14-Jun-13	5 days	French	One more place available
Signal Integrity: Advanced GigaBit-Differential Channel Design (AGCD)	26-Jun-13 to 28-Jun-13	2 days	English	19 places available
Signal Integrity: Essential Principles of Signal Integrity (EPSI)	24-Jun-13 to 28-Jun-13	2 days	English	19 places available
Mechanical design	Next Session	Duration	Language	Availability
AutoCAD - level 1	12-Sep-13 to 20-Sep-13	4 days	French	4 places available
AutoCAD Electrical	14-Oct-13 to 18-Oct-13	5 days	French	2 places available
CATIA V5 – Surface	01-Jul-13 to 02-Jul-13	2 days	English	5 places available
CATIA-Smartteam Basics	16-Sep-13 to 11-Oct-13	10 days	English	4 places available
SmarTeam - CATIA data manager at CERN	23-Sep-13 to 25-Sep-13	3 days	French	8 places available
Office Software	Next Session	Duration	Language	Availability
CERN EDMS - Introduction	27-May-13	8 hours	French	5 places available
ECDL: European Computing Driving Licence Certification	4-Jun-13	3 hours	French	One more place available
EXCEL 2010 - Level 2: ECDL	16-Sep-13 to 17-Sep-13	2 days	French	6 places available
Expression Web - Level 1 (former Sharepoint Designer or Frontpage)	26-Sep-13 to 27-Sep-13	2 days	English	5 places available
Indico Advanced - Conference Organization	13-Jun-13	3 hours	French	7 places available
Indico for beginners - Meeting Organization	13-Jun-13	2 hours	French	7 places available
Lync – click to call and collaborate with others	17-Jun-13	1 hour	French	44 places available
PowerPoint 2010 - Level 1: ECDL	13-Jun-13 to 14-Jun-13	2 days	French	2 places available
WORD 2010 - level 1 : ECDL	24-Jun-13 to 25-Jun-13	2 days	French	5 places available
Software and system technologies	Next Session	Duration	Language	Availability
C++ Part 2: Object-Oriented	01-Jul-13 to 03-Jul-13	3 days	English	5 places available
CERN openlab/Intel Workshop on Numerical Computing	27-May-13 to 28-May-13	16 hours	English	24 places available
Core Spring	23-Sep-13 to 26-Sep-13	4 days	English	3 places available
Drupal Site Developing	04-Jul-13 to 05-Jul-13	16 hours	English	4 places available
Drupal Site Editing	01-Jul-13 to 02-Jul-13	2 days	English	5 places available
ITIL Foundations (version 3) EXAMINATION	12-Jun-13	1 hour	English	12 places available
Intermediate Linux System Administration	19-Jun-13 to 25-Jun-13	5 days	English	9 places available
Introduction to Linux	12-Jun-13 to 14-Jun-13	3 days	English	7 places available
JAVA - Level 2	03-Jun-13 to 06-Jun-13	32 hours	English	2 places available
JCOP - Finite State Machines in the JCOP Framework	24-Jun-13 to 26-Jun-13	3 days	English	5 places available
JavaScript for web development	27-May-13 to 29-May-13	3 days	English	6 places available
Le Langage C (ANSI et C99)	16-Sep-13 to 19-Sep-13	4 days	English	7 places available
Oracle Certified Professional	17-Jun-13 to 21-Jun-13	5 days	English	2 places available
PERL 5 - Advanced Aspects	20-Sep-13	1 day	English	7 places available
PERL 5 - Introduction	30-May-13 to 31-May-13	2 days	English	3 places available
Python - Hands-on Introduction	08-Jul-13 to 11-Jul-13	4 days	English	One more place available
Special	Next Session	Duration	Language	Availability
CST PARTICLE STUDIO	08-Oct-13 to 09-Oct-13	2 days	English	9 places available
Designing effective websites	29-May-13 to 30-May-13	2 days	English	6 places available