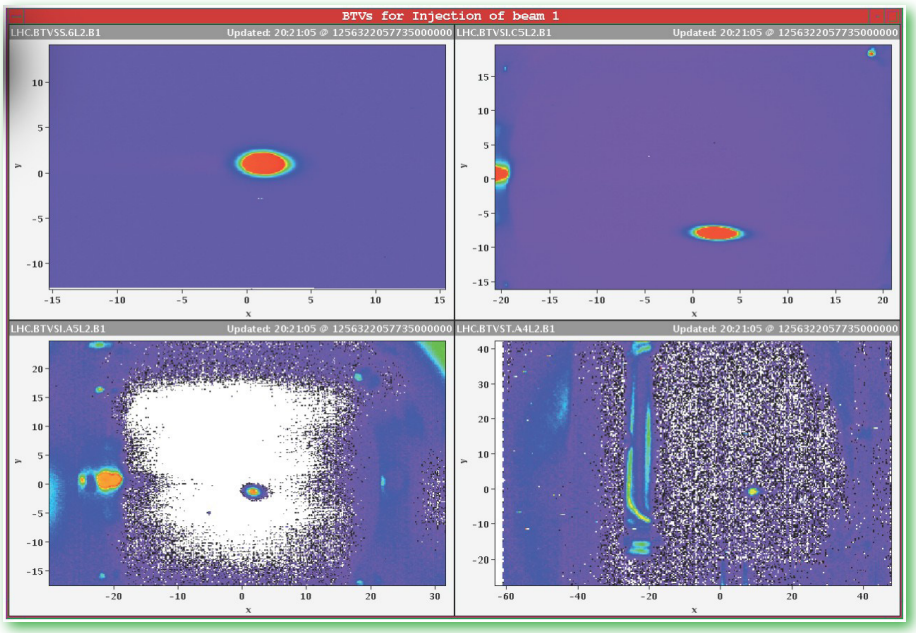
CERN Bulletin

Nos 45 & 46 – 2 & 9 November 2009

Particles are back in the LHC!



The first ion beam entering point 2 of the LHC, just before the ALICE detector (23 October 2009).

Last weekend (23-25 October) particles once again entered the LHC after the one-year interruption following the incident of September 2008. Particles travelled through one sector clockwise and one anticlockwise. ALICE and LHCb, the two experiments sitting along the portion of the beam lines in question, were able to observe the first effects of real beams in the machine.

On Friday 23 October, a first beam of ions entered the clockwise beam pipe of the LHC. Previous tests, on 25-26 September, had involved injecting lead ion beams through the whole injection chain right up to the threshold of the LHC. This time, the lead ions entered the LHC just before point 2, where the ALICE experiment is installed, and were dumped before point 3. These tests enabled machine experts to test the operation of the whole injection chain and an entire sector (sector 1-2) of the LHC.

Several sub-detectors of the ALICE experiment were switched on and saw their first beam. This helped them synchronise with the LHC clock, which scans the entrance of the particle bunches into the machine. The capability of the sub-detectors to measure high particle multiplicities – up to 400 000 hits in the Silicon Pixel Detector – as well as multiplicity variations in response to the changing beam steering parameters was also tested.

On Saturday afternoon, the first proton beam also made its way through the TI8 transfer line up to the anticlockwise beam pipe of the LHC. Protons passed through the LHCb experiment and were dumped just before point 7.

Most of the LHCb sub-detectors were switched off to keep the experiment safe during these delicate operations. Only the

(Continued on page 2)

A word from the DG

Gathering positive experience

Last Monday, the new CERN Machine Advisory Committee (CMAC) met for the first time, and we had good news to tell its members. Over the weekend, injection tests for both LHC beams were successfully carried out. In other words, we've had beam in the LHC for the first time since September 2008. That's a good feeling, but it's no reason for complacency. There's still a long way to go before first physics at the new energy frontier.

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A word from the DG

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Gathering positive experience

As the Bulletin has reported over recent weeks, we're gathering a lot of positive experience with the new quench detection and protection system (QPS), which is already allowing us to monitor the LHC far better than we were able to in the past. So far, the QPS for three of the LHC's eight sectors has been put through its paces, and we've also power tested those sectors to 2000 amperes, the equivalent of around 1.2 TeV per beam. The next step is to slowly increase the current to 4000 amperes, and then on to 6000 amperes, the current needed for 3.5 TeV running. This will take a few weeks.

The road from here should take us to the first circulating beams of 2009 by the second half of November, with collisions at injection energy following soon after. If things go well, we may have the first high-energy collisions before the end-of-year break, which would be the best Christmas present I could wish for. Starting up a new accelerator is a complex process, however, and we're modifying the LHC schedule on a weekly basis in the light of progress. Just last week, we detected a helium leak that diverted attention from other things. Thankfully that turned out to be manageable, and did not slow us down. Commissioning the LHC for 3.5 TeV is the top priority now, and will take several weeks.

The CMAC gave a strong vote of confidence to our prudent, step by step, approach to getting the LHC running again. At the end of the meeting I had a word with Thomas Roser, Chairman of the CMAC and Associate Chairman for Accelerators at the Brookhaven National Laboratory in the USA. "It's good to see things going so smoothly at this stage in the project," he told me. And he should know, having lived through the start-up of another groundbreaking superconducting particle accelerator, Brookhaven's RHIC, ten years ago.

Rolf Heuer

Particles are back in the LHC!

(Continued from page 1)

beam and background monitors remained switched on and operators were able to study the performance of these systems, learn about the types and levels of background to be expected during normal operation and how to correlate them. In particular, this type of exercise provides an opportunity to commission the beam monitoring software (and not just the instrumentation itself), which will be used to monitor the data-taking conditions and allow the operators to take safe and appropriate action. A highlight of the weekend was the switching-on of the LHCb magnet, with operators able to measure its effect on the LHC beam and adjust the magnetic compensators around LHCb to bring the beam back into orbit. This operation was also very successful.

At the same time as these injection tests, magnet powering tests are being performed in seven of the eight sectors of the LHC. Five sectors are already in phase 2, where operators progressively increase the current up to 2 kAmps, allowing the passage and guidance of beams at about 1.2 TeV. Magnet powering tests in the last sector, 3-4, will begin in the first week of November. Furthermore, the qualification of the new quench protection system is progressing well and all splices in three sectors have been checked. All the measured values comply with the stringent standards.

After a very busy weekend, the machine operators and the ALICE and LHCb teams were very happy with the excellent way their equipment operated.

CERN Bulletin

Watch the videos at:

http://cdsweb.cern.ch/record/1215564
http://cdsweb.cern.ch/record/1215560

CERN as seen by its personnel

How are the various players in research experiencing the run-up to the restart of the LHC? How do they feel their work is perceived outside CERN? After interviewing the inhabitants of Meyrin, Divonne-les-Bains and Geneva on the subject of the LHC and CERN, the Bulletin went to put its questions to the CERN personnel themselves.

For some, working at CERN had always been a childhood dream. Today, as we approach the restart of the largest particle accelerator in the world, everybody is very enthusiastic about taking part in this adventure. In the words of a CMS physicist: "This is something that happens once in a scientist's lifetime!"

But what do the researchers consider to be the most important thing we do at CERN? It's difficult to pin them down to any one specific thing, so this question gets the virtually unanimous general reply: "the advancement of knowledge". Many also mention the concrete spin-offs of technology transfer. However, nobody can anticipate what developments will arise in this field: who could have predicted the development of GPS as an application of relativity? So, while future technological innovations cannot be predicted, all believe in the inherent "discovery potential" of fundamental research.

But outside the research facilities, does the world look at what's happening at CERN? This question gets an unqualified yes. The scientists have the feeling that people are watching and above all that they are interested. Conscious that their work is frequently not well understood, they nevertheless consider that "people know that it is something important". In the view of one of the physicists interviewed, "never before has physics excited so much public interest". Despite the more outlandish theories last year expressing fears that the start-up of the LHC would generate dangerous black holes, the researchers think that the public takes rather a favourable view of their work.

Moreover, the scientific community throughout the world will benefit from the work carried out at CERN, since "CERN brings together people of different cultures and histories in an increasingly world-wide collaboration." Furthermore, it will be possible to transmit the data recorded by the experiments in the LHC instantly so that it can be analysed in laboratories throughout the world. As a South African scientist expresses it, this is "democratizing science". So, while the scientists believe that they will learn an enormous amount from their research, they also hope to contribute to furthering human knowledge.... and in their view this will be their most valuable achievement.

Antoine Cappelle

Watch the video at

http://cdsweb.cern.ch/record/1215587

CERN in discussions with its neighbours

CERN recently invited local partners, elected representatives, and representatives of local administrations and associations to an information and discussion evening, giving those invited an opportunity to raise various topics linked to CERN's presence in the local area.

On Tuesday, 20 October the Globe of Science and Innovation took on a distinctly regional flavour when some 60 representatives of local administrations and public bodies in Switzerland and France as well as teachers, heads of local schools and chairs of local associations attended an information and discussion evening at the invitation of the Director-General.

In his opening address, the Director-General underlined CERN's commitment to transparency and the desire to enhance its communication with the local community. This address was followed by four presentations. Philippe Bloch, head of the Physics Department, explained the scientific goals of the LHC and the LHC start-up. Enrico Cennini, deputy head of the Safety Commission, itemised in detail the safety and environmental protection measures that CERN is taking. Thomas Pettersson, head of the General Services Department, presented CERN's future site development projects. Finally, Bernard Pellequer and Corinne Pralavorio, from the Education and Communication Groups respectively, presented the various communication and outreach actions for the local community.

"Our primary motivation was to inform our local partners about the new start-up of the LHC but also about subjects which particularly affect them," underlines Corinne Pralavorio, who is responsible for communications with CERN's local community. "It is more logical and satisfactory for local elected representatives and partners to learn about the latest developments at CERN at first hand rather than via the media."

Those invited were highly appreciative of this open and transparent approach to subjects that are sensitive in certain quarters. "We appreciate having more information on environmental issues", explained Philippe Potdevin, Deputy Mayor of the Commune of Versonnex. Similar appreciation was expressed by the Mayor of Echevenex, to whom, as Vice-Chairman of the Community of Communes of the Pays de Gex with specific responsibility for the environment and agriculture, such issues are of particular concern.

The fact that many members of the CERN personnel, including heads of department, group leaders, the Director of Administration and the Director-General, attended the event to meet CERN's neighbours, listened to what they had to say and entered into open discussion with them greatly enhanced the appreciative response to this communication and transparency initiative.

The second part of the evening, which was devoted to roundtable discussions, further promoted the willingness to enter into dialogue. Those invited were encouraged to comment on the subjects raised in the presentations and their questions were answered at each table by accompanying members of CERN staff. The roundtable session prompted many discussions. As one of the female participants put it: "The atmosphere was very friendly." Written records of the suggestions, comments and observations of the participants at each table during the roundtable session were duly drawn up. "We shall soon prepare a summary of all these reports, which will enable us to focus our local communication initiatives more effectively", explains Corinne Pralavorio.

Much positive feedback on the evening has been received. "The success of this event confirms that we must go out and meet our neighbours and repeat this type of exchange. We will organise similar events on other subjects of interest to our local partners," explains Friedemann Eder, head of CERN's Relations with the Host States Service, which organised the event jointly with the Communications Group.

A new website for CERN's neighbours

The evening for CERN's local partners also marked the launching of a new website for the general public in the local area. The site is a portal with selected items of information relevant to the general public in the local area. There's also an interactive map allowing local surfers to find out which of the Laboratory's sites is hosted by their commune. An email address is included to allow them to provide feedback.

The site, available only in French, can be accessed at the following Web address:

http://www.cern.ch/voisins

or click on the link "Our neighbours" on CERN's homepage www.cern.ch.

CERN and UNESCO reach out to Rwanda

CERN already has a successful relationship with some African countries. However, much remains to be done to improve the dialogue with that continent. A recent trip to Rwanda provided a new opportunity to share knowledge and technology and create a connection that may last for many years.

In addition to physics research, CERN's key missions also include training and international collaboration. Recently, thanks to funding from UNESCO, CERN's Scientific Information Service was able to provide face-to-face training of digital library software developed at CERN, and the CERN Education Group organised a two-day high-school teacher training programme.

"Many African countries are in the process of digitising their libraries," explains John Ellis, CERN's Coordinator for non-Member States. "A workshop was organised in September by CERN in Rwanda to help familiarise librarians there with the library software we have at CERN, with the idea of deploying it and cloning it in these countries."

Jens Vigen, head of the CERN Scientific Information Service, was one of the organisers of the digital library software workshop and explained how amazing and rewarding the experience was for him. "African librarians are fully aware of the strengths of digital libraries and the importance of Open Access publishing, but training and information exchange is needed. The particle physics community is driving many of the developments in this field, so colleagues in university libraries are very keen to take advantage of our experience. The digital library software we use has been developed by CERN. It is open source, which corresponds with CERN's goals of knowledge and technology transfer," he said. Rwanda was chosen for its strong IT profile.

Around 30 librarians and IT specialists participated in the five-day programme, which was divided into two main topics – the principles of Open Access, discussed by Vigen; and the more technical part, taught by Jean-Yves Le Meur, from CERN's IT Department. During the exercise, everyone learned how to install and parameterise the system and then submitted a few documents as examples. "The universities and institutes there are now part of the Academic Repository of Rwanda, a service similar to the CERN Document Server, run from the Kigali Institute of Science and Technology. Our African colleagues have large collections of theses across all subjects, currently held in digital form on CDs, to add to their new repository, which will make the research visible worldwide. They are also interested in including material from CERN, such as the Academic Training Lectures and the Yellow Reports," explained Vigen. The goal is to create a self-sustainable programme that can be handled at the local level.

In conjunction with the workshop in Rwanda, a two-day training course on modern physics was organised as a pilot school for high-school teachers. Seventeen teachers participated from around the country. Rolf Landua, the organiser of the school, explains, "Rwanda was chosen because its telecommunication infrastructure is relatively advanced, they have experienced stability in the country for the past 15 years and CERN has close contacts with the former Minister of Education." The goal is to enable science teachers to talk about modern physics in a motivating and inspiring way, and so encourage more pupils to take up scientific studies.

"The next step is that CERN will invite three Rwandan teachers for a one-week teachers programme to be held here at CERN. These teachers will then become the ambassadors in their country for organising and holding similar courses in Rwanda. We will be keeping in touch with all of them through video conferencing via the optical fibre network of East Africa, which is used in three regional education centres in the country. "

Carolyn Lee

CERN's Jean-Yves Le Meur, second from the right, teaches participants how to install the digital library system on their computers.

Astroparticles win over the public

The first ever European Week of Astroparticle Physics, held from 10 to 17 October, provided an opportunity for the general public to learn about this still relatively little-known branch of science.

The year 2009 was proclaimed the International Year of Astronomy in celebration of the 400th anniversary of the first astronomical observations by telescope, conducted by Galileo Galilei. While astronomy is a topic that the general public is familiar with and interested in, the same is not true of astroparticle studies, a branch of modern astronomy that in many ways is very close to particle physics.

The ASPERA network, to which CERN belongs, coordinates European research on astroparticles. ASPERA wanted to exploit the heightened interest in astronomy to raise awareness of the work currently being done in this field, and that is how the idea of the European Week of Astroparticle Physics was born.

One of the week's highlights, literally, was the brainchild of the IN2P3 research institute in Paris: a laser beam between the Paris Observatory and the Montparnasse tower lit up the sky each time a muon from outer space was detected. A great way to raise awareness: "We were all over the Parisian press," notes Arnaud Marsollier, head of communication for ASPERA and a key figure behind the event. "This initiative stimulated interest in the events that had been organised in the participating countries."

However, it's one thing to attract public interest, and another to satisfy it. There is no patent solution. Across the ten European countries involved, some 40 events were organised for the week—and beyond. "There were many public lectures, of course, which are the easiest events to organise," explains Marsollier. "In Paris, a science café was set up that gave the public a chance to interact with the scientists. In Rome, a major exhibition was opened towards the end of October. And in Spain, physics went on stage in the form of a magic show!"

"The goal was to inform the public about existing experiments, to explain how they work, what we are looking for and what results have been achieved already", he continued. "There is a genuine desire out there to find out more, but the subject is a complicated one. What is needed is a strong campaign of education and communication." For its part, the public was appreciative of the efforts made by the scientists who came to talk about their research into the universe.

The organisers had another task: mobilising physicists to join in the effort to popularise their discipline. "We're going to have a follow-up meeting to see what worked and what didn't," concludes Arnaud Marsollier. "I think that there will be some support for repeating the experiment." Another European week? Maybe not right away. However, 2012 will be the 100th anniversary of the discovery of cosmic rays, and an excellent opportunity to raise public awareness once more.

Antoine Cappelle

A laser beam lit up the Paris sky each time a muon was detected at the top of the Montparnasse tower.

Members of the public were able to meet scientists and find out more about a little-known branch of physics.

Put waste in its place

It doesn't take much of an effort to sort waste, but what a difference it can make - to the environment, of course, but also to CERN's incineration bill.

Everyone knows that sorting waste reduces pollution. By recycling or recovering waste materials, we can reduce the amount of waste that ends up in an incinerator or land-fill, while giving the used material a second life. That reduces the consumption of raw materials and natural resources—and of budget resources. CERN pays lower bill: disposing of a tonne of waste by incineration costs 230 Swiss francs, while a tonne of paper only costs 10 francs to dispose of.

The problem is that much of the waste is not properly sorted. "In 2008, out of more than 1600 tonnes of waste we had to incinerate 600 tonnes, which is an enormous figure!" says Martine Auerbach, who is responsible for the waste removal contract, currently held by Transvoirie. At the end of the day, disposal by incineration accounted for 51% of the bill. Had the waste been better sorted, much of it could have been kept out of the incinerator, and recycled at a lower cost.

For this reason, an awareness campaign will be conducted at CERN: "We will put up posters and ensure waste containers are clearly identified," continues Auerbach. The containers are situated at different points around CERN. It may seem confusing at first, as a separate container is allocated to each type of waste: household waste goes in the containers made of gray metal or black plastic; paper and cardboard go into the green plastic containers; metal waste into special steel containers; and glass goes into the bottle banks. Wood should be stacked next to the paper or household waste containers which are situated outside the buildings, while plastic collection bins have been placed next to the entrances to restaurants and cafeterias. For large quantities and for special waste, for example construction rubble or chemicals, special bins are provided on request.

If people are to become more attentive to this issue, they need to clearly see the benefits of recycling. To this end, awareness campaigns will be conducted on CERN's sites. Did you know, for example, that recycled plastic can be used in the manufacture of piping and floor tiles? Even coffee capsules can be recycled: "The aluminium can be recovered, while the coffee grinds can be processed for composting or as a source of energy for domestic heating. We are therefore looking into ways of collecting the capsules from all the offices." Stay tuned.

To order a waste bin, call 7 7777 or send an e-mail to fm.support@cern.ch. Full details are available from CERN's website at the following URL:

http://dechets-waste.web.cern.ch/dechets-waste/

Antoine Cappelle

A variety of containers are provided to allow waste to be sorted before disposal, thereby making recycling easier.

FAIR-share

Twenty-seven engineers involved in the FAIR project in Germany recently spent three days at CERN. The purpose of their visit: tour ALICE and meet with CERN engineers. This marks the start of a close cooperation.

If you want to build a new particle accelerator and wish to benefit from existing expertise, who do you go to see? Well… why not go straight to CERN? That's what this group of 27 engineers did. They are working on a new accelerator project, the Facility for Antiproton and Ion Research (FAIR), to be built at the heavy-ion research centre GSI located near Darmstadt, Germany. Representing a variety of disciplines, from manufacturing to architecture, they will be responsible for making the project a reality.

The visit was organised from 14-16 October, making it possible to include a tour of the ALICE experiment prior to the re-start of the LHC. However, the main goal was to allow the German engineers to meet with their CERN counterparts. "They had long discussions with members of the different services," says Horst Wenninger, who was responsible for organising the visit. "They were very impressed and full of admiration for what they saw. From tunnel construction to superconducting magnets, the experience gained with the LHC will help the FAIR engineers who are facing similar challenges."

This is not the first time that GSI and CERN have cooperated. Their mutual history goes back three decades. This meeting should lead to a more intense exchange of knowledge, skills, and even personnel. Young people could be among the beneficiaries of this cooperation: "There will be work opportunities at FAIR, and this cooperation could open some doors at GSI for young CERN-trained engineers," continues Wenninger. That's because FAIR, like CERN, is built on international cooperation. And that's where "the CERN spirit is a model," asserts Wenninger.

Antoine Cappelle

The FAIR project engineers and their CERN counterparts.

Change at the top for the CERN physics schools

After directing the CERN physics schools since 1993, Egil Lillestøl has handed over to Nick Ellis. At the same time, Hélène Haller has taken over from Danielle Métral as the schools' administrator.

The CERN physics schools for young experimentalists date back to the 1960s and as early as 1971 collaboration with the Joint Institute for Nuclear Research (JINR) in Dubna led to the Joint CERN-JINR schools, which reached beyond CERN's Member States every two years. Then, in 1993, CERN and JINR agreed to organize the schools jointly every year, as the European School for High-Energy Physics. Egil Lillestøl, has not only run this school very successfully since then, but also created the CERN Latin American School of High-Energy Physics, beginning in 2001. Danielle Métral has been responsible for the schools' administration since 2001, both for the European and for the Latin-American schools. Now the team is handing the reins over to Nick Ellis as the new schools director and to Hélène Haller as the incoming schools administrator.

"The schools provide an outstanding opportunity for the participants to extend their knowledge through the lectures and discussion sessions, and also to discuss their own work with the teaching staff at the poster session," explains Lillestøl. "Nick has been with me since we took over the new series of the CERN-JINR school in 1993. In handing over the responsibility to him and his new team I am confident that the schools are in the best hands."

For his part Ellis says "I am looking forward to the challenge of directing the CERN schools of physics in collaboration with colleagues from JINR and from Latin America, building on the long tradition of these schools that bring together young scientists from different parts of the world. The schools will continue to maintain the highest levels of academic excellence and to foster collaboration between researchers from different countries."

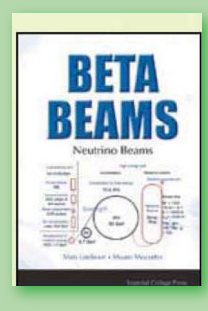
From left to right: Nick Ellis, Hélène Haller, Danielle Métral and Egil Lillestøl.

Many well known particle physicists have passed through the schools – not least CERN's current Director General, Rolf Heuer. At the celebration on 13 October to mark the handover, he warmly thanked Lillestøl for all his work, noting that in its present incarnation the European school has contributed to the successful integration of more nations at CERN. JINR director, Alexei Sissakian, who has been involved with every joint school from 1971 proposed a toast to "a good transformation of the directorate of the school and to the preservation of its traditions, wishing all the best to Nick and Hélène."

Christine Sutton

Literature in Focus

Beta Beams: Neutrino Beams



By Mats Lindroos (CERN) and Mauro Mezzetto (INFN Padova, Italy)
Imperial Press, 2009

The beta-beam concept for the generation of electron neutrino beams was first proposed by Piero Zucchelli in 2002. The idea created quite a stir, challenging the idea that intense neutrino beams only could be produced from the decay of pions or muons in classical neutrino beams facilities or in future neutrino factories. The concept initially struggled to make an impact but the hard work by many machine physicists, phenomenologists and theoreticians over the last five years has won the beta-beam a well-earned position as one of the frontrunners for a possible future world laboratory for high intensity neutrino oscillation physics. This is the first complete monograph on the beta-beam concept. The book describes both technical aspects and experimental aspects of the beta-beam, providing students and scientists with an insight into the possibilities offered by beta-beams; facility designers with a starting point for future studies; and policy makers with a comprehensive picture of the limits and possibilities offered by a beta-beam.

Wednesday, 11 November, 4.00 p.m.
In the Library (bldg. 52 1-052)
Tea and coffee will be served.

Tullio Basaglia

Eugène Vossenberg - 1943-2009

Gene Vossenberg, a valued colleague, passed away on Saturday, 10 October.

Gene was recruited by CERN in 1972 as an in-house inspector of dipoles for the SPS. Three years later he joined the SPS kicker magnet team within the beam transfer group, which is where he spent the bulk of his career. Gene was an innovative engineer who loved his work. He made a substantial contribution to the success of the resonant extraction scheme used in the SPS, and subsequently the SPS-LEP lepton transfer system. More recently, he is credited with the innovations at the heart of the pulse generators used in the LHC's beam dumping system, a key component of the collider's safety systems.

Gene retired in February 2008.

It was a pleasure for us all to work with Gene and be associated with him. We will remember him for the great skill he showed in his work and for his kindness, his congeniality and his enthusiasm.

His colleagues and friends

Take note

ERGONOMICS COURSE

Do you work mainly on a computer? Have you ever given any thought to your eyes or your back…?

The "Ergonomics" course is just for you.

Check it out here and register on EDH.

(lien = http://cta.cern.ch/cta2/f?p=122:9:2416621315417864::::X_STATUS,XS_COURSE_NAME,XS_PROGRAMME,XS_SUBCATEGORY,X_COURSE_ID,XS_LANGUAGE,XS_SESSION:D%2C%2C181%2C%2C3697%2CB%2C)

LOST PARCEL

A parcel containing 20 boxes of DECAdry business cards, weighing about 5.5 kg, has been lost. It had been placed on the red file shelves in the Library.

Anyone finding this parcel is urgently requested to call 16 06 02.

Thank you for your assistance.

FP Department

VACCINATION AGAINST SEASONAL INFLUENZA

As every year, the Medical Service is taking part in the campaign to promote vaccination against seasonal influenza.

Vaccination against seasonal influenza is especially recommended for **people suffering from chronic lung, cardio-vascular or kidney conditions or diabetes, for those recovering from a serious illness or surgical operation and for everyone over the age of 65**.

The influenza virus is transmitted by air and contact with contaminated surfaces, hence the importance of washing hands regularly with soap and / or disinfection using a hydro-alcoholic solution.

From the onset of symptoms (**fever> 38°, chills, cough, muscle aches and / or joint pain, fatigue**) you are strongly recommended to stay at home to avoid spreading the virus.

In the present context of the influenza A (H1N1) pandemic, it is important to dissociate these two illnesses and emphasise that the two viruses and the vaccines used to combat them are quite different and that protection against one will not provide protection against the other.

People working on the CERN site who wish to be vaccinated against seasonal flu may go to the CERN infirmary (Bldg 57, ground floor), bringing with them their dose of vaccine.

The Medical Service will make out a prescription on the day of the jab for the reimbursement claim through UNIQA.

The Medical Service will not administer vaccines to family members or pensioners, who should contact their usual doctor.

Take note

PREPARATION FOR RETIREMENT SEMINAR

The Human Resources Department is organizing a **preparation for retirement seminar**, which will take place on the afternoons of **11, 13, 25 and 27 November 2009**. Similar seminars in the past have always proved highly successful.

Retirement marks the end of a person's working life and the start of a new chapter. This period of transition is experienced differently from one individual to another. In all cases, being well informed and prepared greatly facilitates the change in lifestyle.

We would like to draw your attention to the following information:

Staff concerned: All staff members aged 58 and above have been sent a personal invitation to attend. Spouses are welcome.

Staff members under the age of 58 who are interested in attending the seminar may also apply. Their applications will be accepted subject to the availability of places.

Registration: In view of the number of people concerned and the limited capacity of the Main Auditorium, you are requested to register in advance via Indico at the following address:

http://indico.cern.ch/conferenceDisplay.py?confId=50273

You may register for all the sessions or only the subjects of interest to you.

One afternoon each will be devoted to retirement in the two Host States, Switzerland and France respectively. These two sessions are particularly designed for those:

- who are living in one of these countries, and
- who intend to take up residence there on retirement,
- who have worked and acquired pension rights there.

Presentations: The speakers will be experts from both within and outside the Organization. Each speaker will make a presentation, underlining the key points for future pensioners to note and/or take into account. They will then take questions. Most of the presentations will be in French. However, you are welcome to put your questions in English. Members of the CERN-ESO Pensioners Association (GACEPA) will attend each session and may possibly supplement the presentations with comments based on their own experience. The details of the (provisional) programme can be found at :

http://indico.cern.ch/conferenceDisplay.py?confId=50273

Questions: You may submit your questions **in advance** when you register via Indico. They will be transmitted to the speaker concerned to allow him to reply. Naturally, it will not be possible to discuss details of individual cases, for which the various internal and external services are available to you.

Documentation: The overhead presentations, the complete video recording and a summary of the question-and-answer sessions will be available on Indico at the same site as the programme.

Please also note that the brochure "When you leave CERN" is available on the Human Resources Department website at the following address:

https://cern.ch/hr-services/Int/doc/depart.pdf

If you envisage retiring in the coming two or three years, I strongly encourage you to register for this seminar.

Anne-Sylvie Catherin
Head of the Human Resources Department

Language training

Language Training

Nathalie Dumeaux Tel. 78144
nathalie.dumeaux@cern.ch

PERMANENCE

A "permanence" for language Training has been set up. If anyone has a question or requires information on any aspect of English or French training please come to our office 5 4-016 at the following times.

Lucette Fournier

French courses

Mondays 13.30 - 15.30

Tuesdays 10.30 - 12.30

Tessa Osborne

English courses

Wednesdays 12.00 - 14.00

Thursdays 11.00 - 13.00

NEW COURSES

Specific English and French courses -Exam preparation/

We are now offering specific courses in English and French leading to a recognised external examination (e.g. Cambridge, DELF and BULATS).

If you are interested in following one of these courses and have at least an upper intermediate level of English or French, please enrol through the following link:

English courses

http://cta.cern.ch/cta2/f?p=110:9:1375795393410117::NO::X_COURSE_ID,X_STATUS:4133%2CD

French courses

http://cta.cern.ch/cta2/f?p=110:9:1375795393410117::NO::X_COURSE_ID,X_STATUS:4132%2CD

Or contact:

Tessa Osborne 72957 (English courses)

Lucette Fournier 73483 (French courses)

Marie-Laure LECOQ 74924
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technical.training@cern.ch

CERN TECHNICAL TRAINING: AVAILABLE PLACES IN FORTHCOMING COURSES

The following course sessions are scheduled in the framework of the 2009 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				
Business Objects Basic	5-Nov-09	6-Nov-09	2	English
C++ Part 2: Object-Oriented and Generic Programming	3-Nov-09	6-Nov-09	4	English
CERN openlab Multi-threading and Parallelism Workshop	11-Nov-09	12-Nov-09	2	English
Developing secure software	07-DEC-09	07-DEC-09	0.5	English
Intermediate Linux System Administration	19-Nov-09	24-Nov-09	4	English
JAVA - Level 2	16-Nov-09	19-Nov-09	4	English
JCOP - Finite State Machines in the JCOP Framework	10-Nov-09	12-Nov-09	3	English
JCOP - Joint PVSS-JCOP Framework	23-Nov-09	27-Nov-09	4.5	English
Oracle Database SQL Tuning	07-DEC-09	09-DEC-09	3	English
Oracle Databases: Advanced PL/SQL Programming	2-Nov-09	4-Nov-09	3	English
PERL 5 - Advanced Aspects	10-DEC-09	10-DEC-09	1	English
Project Development using Python	01-DEC-09	04-DEC-09	4	English
Python - Hands-on Introduction	08-DEC-09	10-DEC-09	3	English
Secure coding for Java	24-Nov-09	24-Nov-09	1	English
Secure coding for Perl	26-Nov-09	26-Nov-09	1	English
Secure coding for PHP	25-Nov-09	25-Nov-09	1	English
Secure coding for Python	26-Nov-09	26-Nov-09	1	English
Secure coding for Web Applications and Web Services	23-Nov-09	23-Nov-09	1	English
Web Applications with Oracle Application Express (APEX) 3.2	16-Nov-09	18-Nov-09	3	English
Electronic design				
Advanced VHDL for FPGA Design	30-Nov-09	04-DEC-09	5	English
LabVIEW - Working efficiently with LabVIEW 8	07-DEC-09	07-DEC-09	1	English
LabVIEW Basic I with RADE introduction	30-Nov-09	02-DEC-09	3	English
LabVIEW Basics 2	03-DEC-09	04-DEC-09	2	English
Mechanical design				
CATIA V5 -- Drafting Advanced	6-Nov-09	13-Nov-09	2	French
CATIA V5 – Surfacique 1	04-DEC-09	16-DEC-09	2	French
CATIA-Smarteam Base 2	25-Nov-09	11-DEC-09	7	French
OFFICE SOFTWARE				
A hands-on overview of EVO	9-Nov-09	9-Nov-09	0.5	English
CERN EDMS for Engineers	11-Nov-09	11-Nov-09	1	English
CERN EDMS for Local Administrators	25-Nov-09	26-Nov-09	2	English
Dreamweaver CS3 - Level 2	04-DEC-09	04-DEC-09	1	French
EXCEL 2007 (Short Course I) - HowTo... Work with formulae, Link cells, worksheets and workbooks			9-Nov-09	
9-Nov-09	0.5	Bilingual		
EXCEL 2007 (Short Course II) - HowTo... Format your worksheet for printing	9-Nov-09	9-Nov-09	0.5	Bilingual
EXCEL 2007 (Short Course III) - HowTo... Pivot tables	10-Nov-09	10-Nov-09	0.5	Bilingual
Indico - Conference Organization	20-Nov-09	20-Nov-09	0.5	English
Indico - Meeting Organization	20-Nov-09	20-Nov-09	0.5	English
Novelties Office 2007: POWERPOINT 2007	13-Nov-09	13-Nov-09	1	Bilingual
PowerPoint 2007 - Level 1: ECDL	26-Nov-09	27-Nov-09	2	French
Project Planning with MS-Project	9-Nov-09	13-Nov-09	2	French

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Sharepoint Designer (Frontpage) - Level 1	07-DEC-09	08-DEC-09	2	English
Videoconferencing and collaborative tools	9-Nov-09	9-Nov-09	0.5	French
WORD 2007 - level 1 : ECDL	5-Nov-09	6-Nov-09	2	French
SPECIAL COURSE				
Egroups training	20-Oct-09	20-Oct-09	0.5	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: employees of CERN contractors, with some restrictions). In particular, quoted prices and programmes refer specifically to the CERN community.

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Management & Communication training

CERN MANAGEMENT & COMMUNICATION TRAINING PROGRAMME

Timetable of courses from November to December 2009

Please check our Web site to find out the number of places available, which may vary.

Management Curriculum		
Managing Teams	10, 11, 12 November	(4 places available)
CDP pour nouveaux superviseurs, part 1	30 novembre, 1, 2 décembre	(2 places disponibles)
Managing by Project	1, 2 December	(full)
Communication Curriculum		
Techniques d'exposé et de présentations	10, 11 novembre + 8 décembre	(complet)
Managing Stress	10, 11 November	(6 places available)
Communicating Effectively	11, 12 November + 8, 9 December	(4 places available)
Orientation service	12, 13 novembre	(5 places disponibles)
Gestion du stress	17, 18 novembre	(6 places disponibles)
Animer ou participer à une réunion de travail	9, 10, 11 décembre	(3 places disponibles)

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=300

Management & Communication programme
Sudeshna Datta Cockerill, Head of the programme 74127 - Sudeshna.datta.cockerill@cern.ch
Secretariat 78144 - Nathalie.dumeaux@cern.ch

Seminars

MONDAY 2 NOVEMBER

CERN JOINT EP/PP SEMINARS

11:00 - Bldg. 1-1-025

A Higgs-Analysis Vade Mecum

A. DE RUJULA / CERN

TH JOURNAL CLUB ON STRING THEORY

14:00 - Bldg. 1-1-025

TBA

H. MEYER / CERN

TUESDAY 3 NOVEMBER

TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

Yangians in AdS/CFT integrability

A. TORRIELLI / UTRECHT U.

WEDNESDAY 4 NOVEMBER

TH COSMO COFFEE

11:00 - Bldg. 1-1-025

TH meeting in Les Houches

TH THEORETICAL SEMINAR

14:00 - TH Auditorium, Bldg. 4

TH meeting in Les Houches

FRIDAY 6 NOVEMBER

DETECTOR SEMINAR

11:00 - Bldg. 40-S2-D01

Studies of scintillating crystals for HEP calorimetry exposed to high hadron fluences

F. NESSI-TEDALDI / EIDGENOSSISCHE TECHNISCHE HOCHSCHULE ZURICH (ETH)

PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - TH Auditorium, Bldg. 4

TH meeting in Les Houches

MONDAY 9 NOVEMBER

TH JOURNAL CLUB ON STRING THEORY

14:00 - Bldg. 1-1-025

TBA

T. TAYLOR

TUESDAY 10 NOVEMBER

TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

TBA

B. HAGHIGHAT / BONN U.

WEDNESDAY 11 NOVEMBER

TH COSMO COFFEE

11:00 - Bldg. 1-1-025

TBA

S. RENAUX-PETEL / UNIV. PARIS7

HR SEMINAR

13:00 - Main Auditorium, Bldg. 500

Preparation à la retraite - 2009 - Preparing for retirement

TH THEORETICAL SEMINAR

14:00 - TH Auditorium, Bldg. 4

TBA

E. MOTTOLA / LOS ALAMOS AND CERN

ISOLDE SEMINAR

16:00 - Bldg. 304-1-001

Exotic beta-decays of light nuclei

R. RAABE / CEA - GANIL/CAEN

THURSDAY 12 NOVEMBER

TH BSM FORUM

14:00 - Bldg. 1-1-025

Vacuum stability in the BMSSM

C. DELAUNAY / CENTRE D'ETUDES DE SACLAY (CEN SACLAY)

FRIDAY 13 NOVEMBER

PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - Bldg. 1-1-025

TBA

A. STRUMIA / PISA