Rendez-vous with “InGRID”

It’s been a year since the CERN Council approved our policy on intellectual property management, so I’d like to take a look at what we’ve achieved since then. In short, a great deal. We’ve moved away from a fairly unregulated approach towards a well balanced and clearly defined system built around sound intellectual property management designed to deliver maximum dissemination and benefit for society from CERN innovation. It’s a move that I celebrate and fully support.

Rendez-vous with “InGRID” (Continued on page 2)

You may have been wondering what those long arching rods are that have suddenly appeared in front of Building 33. Well, we are pleased to introduce InGRID, the temporary garden that is transforming the old parking area between Building 33 and the Globe into a new pedestrian concourse around the tram stop. This space will serve as a multimodal concourse, a meeting point, a waiting area and a place to chat, reserved for pedestrians, CERN personnel and visitors. “We want to create a user-friendly atmosphere by creating a dedicated space for pedestrians,” explains Laurent Essig, landscape architect, lecturer at the Haute Ecole Spécialisée and creator of the InGRID project. CERN also wanted this installation to coincide with the arrival of the tram on 30 April and thus to demonstrate that it is possible to alter the appearance of an area completely through temporary installations, which are quick and inexpensive to erect. The former car park will be transformed into a public concourse where people will be able to choose

Pending the elaboration of the master plan which should be implemented in 2013 and the results of a competition for the design of the major public areas between Entrance A and the St. Genis customs (along the Route de Meyrin), CERN and the Canton of Geneva have worked together on the installation of a temporary garden financed by the Canton. The garden will bring a bit of style to the area between Building 33 and the Globe of Science and Innovation.

(Continued on page 2)
Knowledge dissemination: a core mission

In 2009, CERN signed two partnership agreements to develop CERN technologies, two commercial licenses and eleven R&D licenses. Last year, the figures were six partnership agreements, five commercial licenses and twenty R&D licenses, indicating a real increase in dissemination efforts. From 2009 to 2010, however, the number of new technologies that were identified and disclosed hardly changed: nine in 2009, ten in 2010.

These numbers are good, but we must improve, particularly in terms of disclosures. It’s part of our core mission, enshrined in the CERN Convention, to make the results of our work as widely known and used as possible, and that doesn’t just apply to physics results, it applies to all knowledge generated here. Our intellectual property policy reflects this, clearly putting the emphasis on sharing what we know.

I have frequently pointed out the virtuous circle linking basic and applied research: the needs of basic research drive innovation, which in turn provides new tools for basic research to advance. Every one of us has a potential place in that circle, since at the end of the day innovation stems from invention, and inventions are made by people.

Our policy recognises this by rewarding inventiveness and encouraging people to engage with knowledge and technology transfer. One year from now, I’d like to be able to report even more success in our intellectual property management, and I’m relying on you to help me.

Rolf Heuer

between the tram, the bus, the shuttle, a bicycle or a hired car.

The most outstanding feature of the concourse is the 34 modules containing the almost 4000 8m-high willow rods. “The sprays of willow rods are reminiscent of the trajectories of particles after particle collisions,” explains Laurent Essig. “The layout of the installation is also an allusion to the GRID, which is a network for sharing calculations, connecting machines and conveying knowledge, hence its name. This garden also symbolises the interconnections between human beings and the sharing of their ideas.” The willows are arranged in three rows in front of Building 33 and one in front of the Globe. “Installing the rows of willows on both sides of the Route de Meyrin provides a thematic link between the two spaces. It will also delimit the pedestrian zone,” confirms Marc Chaataigneau of the GS Department, who is in charge of the work.

The temporary nature of this garden has represented a real and non-negligible challenge for its creation: it had to have maximum impact with a minimum of resources. As Laurent Essig points out: “In a constantly changing world, this is a very interesting aspect. It is important to design installations that can evolve over time. In two or three years’ time, this temporary garden will be replaced by a definitive installation and the 34 modules will be scattered around the CERN site.”

We have pleasure in inviting you to the inauguration of InGRID at 11.30 a.m. on 29 April, when you will be able to find out about the symbolism behind each aspect of this garden.

Laëtitia Pedroso
After coming out of the technical stop on 1st April, a series of rigorous tests with low-intensity beams was performed to make sure that everything was working as it should. This is standard procedure, as a number of hardware (and software) changes are made during a technical stop and it is imperative that we make sure that none of these have impacted machine protection. These tests continued into the weekend of 2-3 April and a number of technical issues were resolved.

After a successful calibration run at 1.38TeV (see Bulletin No. 14/2011), the LHC then went into a four-day technical stop on Monday 28th March. Work conducted during the technical stop included wrapping solenoids around vacuum pipes to help counteract electron-cloud effects. X-rays of the cryogenics piping line in sector 45 were also taken, and a cryogenics compressor was replaced at Point 4.

The LHC then moved into a week-long scrubbing run, beginning on Monday 4 April. Until now, the LHC has been running with a relatively low number of widely spaced bunches (2010 saw 368 bunches with 150 nanosecond spacing; 2011 has seen 200 bunches with 75 nanosecond spacing). Achieving smaller bunch spacing and more bunches is the target for the next two years of LHC operation as it results in higher luminosity.

The recently installed solenoids suppress the electron cloud effect by creating a longitudinal magnetic field that bends back the emitted electrons avoiding their escape from the beam pipe surface and thus preventing their participation in the avalanche process in the beam pipe.

What is a scrubbing run?
Combining small bunch spacing with a high number of bunches leads to an effect known as “electron cloud”. This occurs when photons emitted by the accelerated protons hit the surface of the beam pipe, releasing electrons to form an “electron cloud”. Upon impacting with the beam pipe, the energetic electrons can also release gas molecules trapped inside the metal, leading to an avalanche process.

During a scrubbing run, a high beam current at low energy is injected into the pipe to induce electron clouds under controlled conditions. This is meant to release as many gas molecules as possible in order to later pump them out. This improves the surface characteristics of the beam pipe. The process is known as “scrubbing” and is what the LHC will be doing over the next few days.
ALICE’s wonderland reveals the heaviest antimatter ever observed

The STAR experiment at RHIC came first and published the result in March: they presented evidence of 18 anti-nuclei of Helium 4 collected over several years of data taking. “ALICE came second but it’s amazing to see how fast the results came,” exclaims Paolo Giubellino, the experiment’s spokesperson. “We were able to confirm the observation of 4He anti-nuclei with data collected in November 2010.”

Scientists agree on the fact that antimatter was created in the Big Bang together with matter. However, today we do not observe antimatter outside the Earth’s atmosphere, where antimatter particles are created by the collisions of cosmic rays with the gas molecules. The disappearance of antimatter from the Universe is one of the big mysteries researchers are also trying to solve at the LHC. “In particle collisions, it is not rare to observe the production of antimatter particles,” says Giubellino. “However, things change a lot when we try to form anti-nuclei. RHIC experiments and ALICE had to analyse large amounts of data to be able to spot the rare anti-helium nuclei, which contain two antiprotons and two antineutrons.”

“The STAR and ALICE results clearly demonstrate that, in colliders, matter and antimatter are produced symmetrically,” says Peter Braun-Munzinger, from the ExtreMe Matter Institute, GSI, Darmstadt, Chair of the ALICE Collaboration Board. “We will have to collect more data and study the fine properties of the various physics processes involved in the production of anti-nuclei. This is in our plans for 2011.”

For ALICE, the search for anti-nuclei produced in lead-lead collisions at the LHC is part of a larger campaign to look for all sorts of matter and antimatter ‘conglomerates’, which might come out of the hot and dense quark-gluon plasma. “The whole collaboration is now concentrating on completing the analysis of the 2010 data set. The rich harvest of results will be presented in May at the Quark Matter Conference (http://qm2011.in2p3.fr/node/12), which will be held in Annecy (France),” concludes Giubellino.
New EU project supports LHC theorists

LHCPhenonet, a new EU-funded research network aimed at improving the theoretical predictions that guide the LHC experiments, has begun its 4-year run as a Marie Curie Initial Training Network. CERN joins the Network as an associate partner, along with almost 30 multinational institutions and computing companies.

At the Network’s kick-off meeting in Valencia, Spain (February 1-4), some 70 researchers met to discuss the research developments in higher order perturbative corrections in the Standard Model and beyond. “The goal of our research is to obtain more accurate theoretical predictions to compare with the data from the LHC experiments,” says German Rodrigo, coordinator of the LHCPhenonet Network and a researcher at the Instituto de Física Corpuscular (IFIC). “By improving the accuracy of the theoretical calculations that pilot the LHC experiments we will improve the reliability of experimental results.”

The project also aims to develop customisable, open source software for collider physics. Researchers will work with computing companies such as Wolfram Research and Maplesoft (the developers of Mathematica and Maple, respectively) to bring out the best new software. This collaboration will also provide researchers with the opportunity to explore alternative careers for their skill sets. “Theorists are constantly pushing the boundaries of computing,” says Rodrigo. “LHCPhenonet will provide students with an interdisciplinary environment to explore how their career in basic research could change into a career in industry.”

The project’s mid-term meeting is scheduled to take place at CERN in October 2012.

Katarina Anthony

Theorists from around the world gathered in Valencia to attend LHCPhenonet's kick-off meeting.
The first poster session by students working on the LHC experiments, organised by the LPCC, was a great success. Showcasing the talents of over a hundred young physicists from all over the world, it was an opportunity for everyone at CERN to check out the wide range of research work being done by the new generation of physicists at CERN.

I can discuss my work with. I really hope to be able to come back to CERN once I've finished my doctoral thesis!

While many doctoral students split their time between CERN and their university, some are here full-time. Samir Arfaoui, who is taking part in the ATLAS collaboration, says: “I’ve been working at CERN for three years under a doctoral-student contract. For my thesis I’m also signed up at the University of Aix-Marseille II, but I don’t physically work there. I love CERN, it’s a great place. There are so many people from all over the world here!” And many people indeed turned up to admire the poster session, so many in fact that the organisers are already planning to set up the exhibition in a larger area next time.

All the posters presented at the session can be viewed here:

http://indico.cern.ch/conferenceDisplay.py?confId=132078

Anais Schaeffer

* Heavy quark physics, top quark physics, Higgs searches, QCD and final states in pp and Pb-Pb collisions, W and Z physics, luminosity measurements, detector performance, operations and upgrades, triggers and computing, beyond Standard Model searches.
Centenary of the discovery of superconductivity

On 8 April 2011 it will be a hundred years since the discovery of superconductivity by the Dutch physicist Kamerlingh Onnes. To mark the occasion, the University of Geneva and MANEP are organising a week-long interactive workshop at the PhysiScope. “The purpose of this initiative is to introduce the general public to this spectacular phenomenon by giving them an opportunity to take part in entertaining experiments”, explains Adriana Aleman, Head of Communications of the University of Geneva.

As its contribution to the events, CERN will be organising a lecture in the Globe on 13 April given by Philippe Lebrun, an expert on the field of superconductivity in the DG Department, which will be followed by a re-enactment of the historic experiment. “At CERN superconductivity was first used in particle detectors at the large BEBC bubble chamber in the 1970s, followed a decade later by two LEP detectors which used superconducting magnets”, explains Philippe Lebrun. Over the same period, the phenomenon was also being applied in magnets and accelerating radio-frequency cavities in accelerators. This legacy from the first superconducting machines has now been passed down to the LHC, which could not function without this technology.

To mark the centenary of the discovery of the phenomenon of superconductivity, MANEP (http://www.manep.ch/index2_fr.html) and the University of Geneva are organising open days at the PhysiScope between 8 and 15 April 2011. On 13 April CERN will make a contribution to the series of events with a lecture on superconductivity followed by a demonstration of the phenomenon at the Globe.

The special characteristic of superconductivity lies in the capacity certain materials have to allow an electric current to pass through them without any resistance when they are cooled to very low temperatures. Superconducting materials also demonstrate unusual magnetic properties: for instance, if you place a sample of a superconductor above a magnet, it will float in the air, a phenomenon known as magnetic levitation.

The festivities associated with the discovery of superconductivity will continue this autumn at the Fête de la Science between 10 and 15 October 2011: special events for schools and for the general public will be organised at the Globe. The links between science and its applications will be highlighted for the general public in a series of exhibitions, projections of documentaries and a visit to SM18.

Anaïs Vernède

Historic graph showing the superconducting transition of mercury, measured in Leiden in 1911 by H. Kamerlingh Onnes.

Did you know?

Applications of superconductivity

In addition to use in the LHC’s magnets and accelerating cavities, techniques linked to the phenomenon of superconductivity are used in the medical field. In magnetic resonance imaging (MRI), superconductivity makes it possible to produce large volumes of magnetic fields without the need to develop huge machines and provides perfect field stability. More recently, superconductivity is beginning to be used to develop more compact and efficient electrotechnical machines because it reduces energy loss during the transit of the electric current.

Other applications are being studied such as the transport of electrical energy derived from the sun’s energy over long distances from the South to the North via superconducting power lines across the Mediterranean.
ISOTDAQ - where students learn about trigger and data acquisition

Where can students learn to implement a good trigger and to design the data acquisition system for today’s increasingly complex experiments? Universities rarely include classes on such specific topics. The ISOTDAQ School (http://isotdaq.web.cern.ch/isotdaq/isotdaq/Home.html) trains students and helps them gain hands-on experience of trigger systems, data-acquisition hardware and software, and data-transfer technologies.

Leading experts in the field gave lectures on various topics, such as trigger systems, data-acquisition hardware and software, and data-transfer technologies”, explains the organiser, Enrico Pasqualucci, an INFN researcher and the ATLAS Muon DAQ Coordinator. “The aim of the School is to provide a balance between theory and practice, so the lectures were accompanied by twelve lab sessions, each lasting about two hours”. The preparation and execution of the lab sessions involved sixteen tutors, mostly from CERN’s Physics Department, including eight Marie Curie Fellows from ACEOLE.

Through the ISOTDAQ labs, participants gained practical experience in the topics covered by the lectures. “Learning by doing was the motto of the School”, said Markus Joos, leader of the practical lab sessions. “The feedback we received from the students was extremely positive with respect to both the scientific quality of the programme and the atmosphere. The school was a learning process for all of us, the students and the tutors alike. One of the most challenging aspects about being a tutor in this School is to work with students from all over the world, from different backgrounds and cultures. For me, teaching does not only mean imparting knowledge, but also networking with the next generation of TDAQ experts”.

After a first edition in Ankara in 2010 and now Rome, the School will continue to be an annual event. As such, it has also attracted the attention of the CERN Knowledge and Technology Transfer group as “one of the striking examples of knowledge and technology transfer”.

See the video at:
http://cdsweb.cern.ch/record/1342126

One of the commercially available FPGA development boards from Altera. This was used in one of the practical exercises at ISOTDAQ2011 to teach students the principles of FPGA programming.

ISOTDAQ school students during a lab session.
Full metal jacket!

For many years, the members of CERN’s Fire Brigade went on call-outs clad in their work trousers and fire-rescue coats, which only afforded them partial protection. Today, textile manufacturing techniques have moved on a long way and CERN’s firemen are now kitted out with state-of-the-art personal protective equipment. The coat and trousers are three-layered, comprising fire-resistant aramide, a protective membrane and a thermal lining.

“This equipment is fully compliant with the standards in force and is therefore resistant to cuts, abrasion, electrical arcs with thermal effects and, of course, fire,” explains Patrick Berlinghi, the CERN Fire Brigade’s Logistics Officer. You might think that such clothing might be a bit uncomfortable, but you would be wrong. The jacket has been specifically tailored to give the fire-fighters maximum mobility and ease of movement during operations, and is fitted with a protective hood and emergency drag handle.

The CERN Firemen also have to use site-specific devices such as dosimeter, access card and radios, for which several pockets and storage pouches have been added for convenience of use.

The bright orange colour with all-new high-visibility stripes will make it easy to distinguish the CERN firemen from their Swiss and French counterparts, whose fire-fighting attire is yellow and blue respectively.

Laëtitia Pedroso

Ten years ago, standard issue clothing only gave CERN firemen partial protection but today our fire-fighters are equipped with state-of-the-art, full personal protective equipment.
A gift for the Happy Children’s Home orphanage

Profits from the ATLAS Resonance CD have been donated to the Happy Children’s Home in Pokhara, Nepal (http://www.happychildrenshome.org/). The orphanage was founded by Mette Stuwe, a former CERN staff member, and has received more than 14,000 CHF.

CERN Bulletin

News from the Library: Browse Library books directly from your desktop

Google Books (http://books.google.com/) is an initiative launched by Google in 2004, in collaboration with a range of publishers and large libraries, which provides the books online and enables searches of the text from cover to cover. For titles that are out of copyright, or in cases where Google has struck an agreement with the publisher, the entire books can be read online. For other books, users can still search in the entire text but, depending on the agreement reached with the publisher, they may only be able to read a limited amount of pages (limited preview) or a few lines of text (known as snippets). Google Books also provides additional information such as reviews and links to related titles. Today, there are more than 15 million scanned books in Google Books.

Over the last few weeks, Google Books has been “mashed up” with CERN’s digital library. All book records are now linked to the digital version when they become available in Google Books. This opens up a new universe for library users; now one can simply look up a text string or a formula, launching a search inside books that previously had been only on loan. This will be particularly useful for popular titles such as Introduction to High Energy Physics by Perkins and Statistical Data Analysis by Cowan, which are not yet available online from the publisher.

This service is a useful complement to the Library’s 15,000-strong e-book collection and will continue to be further integrated with the catalogue. To take advantage of this new function without getting lost in all of Perkins’ books, just search for the book in CDS and click on the Google Book link from the “detailed record”.

Please send any feedback to library.desk@cern.ch.

CERN Library
Disputes may be beneficial

Sam* has been working in his position for many years. During his annual interviews with his group leader Jerry*, he was always told that his job performance was satisfactory and no criticism was raised. Sam really appreciated Jerry’s fairness and was happy to work with him. The written appraisals were in the same tone, so Sam never imagined that something could be blamed on him. His career level was improving, although not as fast as he would have liked it to.

To begin with, Jerry had some doubts about Sam’s capabilities, but preferred to wait and see if the situation would improve by itself, counting that Sam’s expertise would improve with time. Later on, it turned out that Jerry had so many other challenges that he could no longer find the time to closely monitor Sam’s performance. Consequently, when the annual interview came, he did not feel that he was in a position to make any specific remarks about Sam’s slowness at work and so filled out Sam’s appraisal with satisfactory comments to hide his lack of coaching.

During the same period, Jerry counted on Sam’s colleagues to keep the group running smoothly. Finally the situation reached the point where Sam’s presence in the group was not necessary, so Jerry abruptly informed him that he was no longer needed and that he should find another job at CERN.

Sam was flabbergasted and found this decision to be completely unjustified and arbitrary, as his work had always been considered to be at least at a satisfactory level, if not higher. He then filed an informal complaint with the Ombuds against Jerry for abuse of authority. The dispute was open.

Both parties accepted mediation, during which Jerry told Sam of his shortcomings. It was a real shock for Sam but he understood the comments, and understood how he could overcome his weaknesses in order to favour his career. He consequently regained his enthusiasm for his job, so he went back to work at full speed.

Jerry did not like being confronted by Sam, but made an effort to understand that he should have pointed out his criticism of Sam’s work a lot sooner, as he now saw the disastrous consequences of his non-involvement. He decided to spend more time with his supervisees in order to coach them more effectively. His subsequent appraisals were more fair and balanced, pointing out specific topics of concern.

Although it was hard for both of them to face the true facts, they finally realized that it was in their own interest. The Organization won on both counts.

Conclusion

In general, if all disputes are avoided or suppressed, CERN may ignore wrongs and injustices that leave the aggrieved parties frustrated and bitter. Therefore, in an Organization where breaches of the Code of Conduct and possible harassment can happen on occasions, disputes may play an important role towards positive change, provided that favourable solutions are reached for both the people involved as well as the Organization itself.

Contact the Ombuds early!
http://cern.ch/ombuds

Vincent Vuillemin

* Names and story are purely fictitious.

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.
It was with deep sadness that we learnt on 25 March of the sudden death of Lionel Metral. Lionel was highly appreciated by his colleagues in his professional activities and by all those who met him in his numerous social activities at CERN, in particular the dance club.

Lionel arrived at CERN in 1994 in the framework of the LHC development contracts and rapidly made his mark in the field of cryogenics in which he spent most of his career at CERN. In his first few years, Lionel took part in the design, development and commissioning of a substantial proportion of the test benches for the LHC cryogenic components. Examples of his contributions include his work on the test cryostats for magnetic refrigeration, the test cryostats for the cold compressors, and the test benches for the validation of pressure sensors and cold flow meters. He went on to develop the test benches to validate the LHC current leads.

From 2000 Lionel applied his talents to designing the LHC’s cryogenic electrical feedboxes (DFBs). Through his creativity and his ability to transform ideas into reality in record time, he was one of the drivers of the DFB project. Having developed several prototypes and components, Lionel naturally took over responsibility for the production of the busbar assemblies that are one of the main components of the DFBs. During these years of intensive work, Lionel managed the cryogenic development workshop, where he succeeded in creating a professional environment that was congenial as well as demanding in terms of quality and very successful in terms of performance.

During the period of LHC start-up from 2007, Lionel managed the DFB consolidation operations. Once again, he showed his mettle in the level of his achievements under constant pressure from a very tight schedule. After the events of September 2008, Lionel was once again called upon to make a contribution with the repair of the jumper connections of the LHC cryogenic distribution line. More recently, while continuing to follow-up consolidation operations, Lionel threw himself into new development activities by his contribution to the design of highly advanced cryogenic systems, such as for the integration of the AEGIS magnets, and the development of measuring systems for the Central Cryogenic Laboratory.

In all his activities, Lionel demonstrated an infectious enthusiasm and an energy that was a natural source of motivation for all those who worked alongside him. Whether it was to launch a crash programme to develop a complex system or to organise the end of year meal for the entire group, Lionel was the man to turn to. We have lost not only a colleague but also a friend.

Our thoughts are with his family and all those close to him.

His friends and colleagues
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.

INTRODUCTION OF A MEDICAL QUESTIONNAIRE CONCERNING LONG-TERM SICK LEAVE

In order to ensure a closer follow-up of those on long-term sick leave, the Organization will introduce a new medical questionnaire to be sent to employed members of the personnel.

This questionnaire consisting of four questions (concerning the diagnosis, pending and future examinations and treatments, the prognosis and the possibility to resume work) will be sent from the Consulting Medical Practitioner to all employed members of the personnel following two consecutive months of sick leave and, thereafter, periodically on a case by case basis.

The employed member of the personnel is requested to submit the medical questionnaire to his/her medical practitioner (or the specialist taking care of him/her) in order to complete and return it to the Consulting Medical Practitioner.

It should be noted that this questionnaire does not exempt, in any way, the employed member of personnel from providing a medical certificate for all absence due to illness of more than three consecutive calendar days.

The procedure to follow in case of illness is outlined in the Admin e-guide, available via the HR Department website.

Human Resources Department

PROCEDURE FOR THE CLASSIFICATION OF PROFESSIONAL ACCIDENTS OF MEMBERS OF THE PERSONNEL – REMINDER

HR Department would like to remind members of the personnel that, according to the procedure for an accident deemed to be occupational and according to paragraph 29 of Administrative Circular No. 14 (Rev.2), they are requested to complete an accident declaration form (HS 50) within ten working days after the accident has occurred. Once this deadline has passed, HR Department will be unable to proceed with the classification of the accident and, consequently, medical expenses that may arise linked to this accident will be reimbursed under the non-occupational scheme.

In addition, any request for the classification of occupational accidents must be accompanied by a medical certificate detailing the bodily injuries resulting from the accident in question.

(*) Or within three months of its occurrence if the victim or his beneficiaries are materially unable to meet this deadline.

Human Resources Department

NEW SET OF CHEMICAL SAFETY RULES

A new set of four Safety Rules was issued on 28 March 2011:

* General Safety Instruction GSI-C1, Prevention and Protection Measures (en);
* General Safety Instruction GSI-C2, Explosive Atmospheres (en);
* General Safety Instruction GSI-C3, Monitoring of Exposure to Hazardous Chemical Agents in Workplace Atmospheres (en).

These documents form part of the CERN Safety Rules and are issued in application of the “Staff Rules and Regulations” and of document SAPOCO 42.

These documents set out the minimum requirements for the protection of persons from risks to their occupational safety and health arising, or likely to arise, from the effects of hazardous chemical agents that are present in the workplace or used in any CERN activity.


HSE Unit

TAX DECLARATION: FOR THE ATTENTION OF MEMBERS OF THE PERSONNEL AND PENSIONERS LIVING IN FRANCE

Exchange rate for 2010

For 2010, the average annual exchange rate is 0.73 EUR for 1 CHF.

HR Department

TAKE CARE OF YOUR MOUSE!

“Stop — Think — Click” is the basic recommendation for securely browsing the Internet and for securely reading e-mails. Users who have followed this recommendation in the past were less likely to have their computer infected or their computing account compromised.

We would like to thank all those who donated their mouse to the CERN Animal Shelter for Computer Mice (http://cern.ch/c-a-s). For those who still use a mouse, please stay vigilant and alert: do not click on links whose origin you do not trust or which look like gibberish. Do not install untrusted software or plug-ins, since software from untrusted sources may infect or compromise your computer, or violate copyrights. Finally, take particular care with e-mails: Do not open unexpected or suspicious e-mails or attachments. Delete them if they do not concern you or if they appear strange.

If in doubt, or if you have questions, please do not hesitate to contact:

Computer.Security@cern.ch

IT Department
TO ALL MEMBERS OF THE PERSONNEL

Summer work for children of members of the personnel

During the period from 13 June to 16 September 2011 inclusive, there will be a limited number of jobs for summer work at CERN (normally unskilled work of a routine nature), which will be made available to children of members of the personnel (i.e. anyone holding an employment or association contract with the Organization). Candidates must be aged between 18 and 24 inclusive on the first day of the contract, and must have insurance coverage for both illness and accident. The duration of all contracts will be 4 weeks and the allowance will be 1717 CHF for this period. Candidates should apply via the HR Department's electronic recruitment system (E-rt):


Completed application forms must be returned by 11 April 2011 at the latest. The results of the selection will be available by the end of May 2011.

For further information, please contact:

Virginie.Galvin@cern.ch

HR Department
Tel. 72855

ANNOUNCEMENT CONCERNING THE UBS BANK

The CERN Management and UBS SA announce that the bank will not apply the “additional charge for clients domiciled abroad” to UBS CERN branch account holders with contracts as employed (MPE) or associated (MPA) members of the personnel with the Organization. In addition, pensioners of the CERN Pension Fund are exempt from the charge, wherever they are domiciled.

If you have any further questions, please talk to the UBS representatives at the UBS CERN branch in the Main Building. UBS will not inform clients individually.

DUTCH SCHOOL IN GENEVA

The Dutch School in Geneva organizes Dutch education for children in the primary and secondary school. For the school year 2011-2012 the Dutch School in Geneva is looking for qualified part time teachers Dutch for the primary and secondary school. If you are interested, please send your application and curriculum vitae in Dutch by email to the NTC coordinator, Mrs. Anne Saeyes (anne.saeyes@free.fr).

More info:

www.ntcgeneve.info

De vereniging Nederlandse Taal en Cultuur De Taalfontein, kortweg NTC Genève, is een oud-ervereniging, die tot doel heeft de Nederlandse taal en de Nederlandse en Vlaamse cultuur in de regio Genève te stimuleren. Dit geschiedt d.m.v. het organiseren van Nederlandse les voor leerlingen zowel in het basisonderwijs als het voortgezet onderwijs.

Voor het volgende schooljaar zoekt NTC parttime docenten (M/V) vanaf 2 uur per week, zowel voor het Primair Onderwijs als voor het Voortgezet Onderwijs, met name voor de IB-opleiding.

Voor het Primair Onderwijs dienen geïnteresseerden een PABO opleiding voltooid te hebben. Voor de IB-opleiding een universitaire talenopleiding.

Salaris en werktijden zullen in onderling overleg worden vastgesteld.

Meer info over NTC vindt u op www.ntcgeneve.info

Bent u geïnteresseerd? Stuur dan uw sollicitatie, inclusief uw curriculum vitae, per e-mail naar Anne Saeyes (anne.saeyes@free.fr).
CERN SCHOOL OF COMPUTING
2011 - REGISTRATION IS OPEN

CSC2011 will take place in Copenhagen from 15 to 26 August.
The programme comprises three main themes: Data Technologies, Base Technologies and Physics Computing, and will address a number of timely questions including:
- Do you know how to bridge Grids and Clouds using virtualization technology?
- Is it possible to simplify LHC physics analysis using a virtual machine?
- How can reliable storage services be built from unreliable hardware?
- Why are tapes still used in high energy physics data storage?
- How can I write code for tomorrow’s hardware, today?
- Do you want to see your software through attacker’s eyes?
- Can you hack your own code?
- What’s so special about high energy physics’s data format?
- What are the key statistical methods used in physics data analysis?
The CSC is a true Summer University. The focus is on delivering knowledge rather than know-how, which can better be provided in the form of training at home institutes.
A final examination is proposed to students. Successful participants will receive the highly recognized CSC Diploma as well as formal Certificates of Credits awarded by the University of Copenhagen.
Networking and socialization is the other goal of CSCs. One vehicle for social networking is the CSC Sport Programme which proposes two to three hours of sport every afternoon to those who are interested.
Full information on the event at:
https://csc.web.cern.ch/CSC/

François Fluckiger, CSC Director
IT Department

Lunchtime Film presentation

TV Programme Presentations:

Kreuz und Quer: Im Anfang war das Teilchen-CERN und die Frage nach Gott by ORF (2010)

and Faszination Wissen: CERN-LHC by Bayerischer Rundfunk (2010)

ORF’s Kreuz und Quer: Im Anfang war das Teilchen-CERN und die Frage nach Gott presents a debate on science and religion and their relationship. The film by Stefanie Mahler and Niki Popper leads a discussion between physicists and theologians on the basis of such questions as what role does coincidence play vs. what is the human responsibility and whether there is a place for God between all these questions and answers. Even in these modern times, 80% of the mass distributed in the universe is made of an unknown origin.

Bayerischer Rundfunk’s Faszination Wissen: CERN-LHC, CERN physicists explain the exciting physics searches underway at the Large Hadron Collider. By colliding protons that have been accelerated to almost the speed of light, the LHC is able to create the conditions that existed just after the Big Bang. Physicists are carefully analyzing these collisions to better understand the Universe. Their focus is on the hunt for the Higgs boson and understanding dark matter and dark energy, as well as finding some interesting surprises.

Kreuz und Quer: Im Anfang war das Teilchen-CERN und die Frage nach Gottwill be presented on Thursday 21 April from 13:00 to 13:30 - Language: German
Faszination Wissen: CERN-LHC will be presented on Thursday, 21 April from 13:30-14:00 - Language: German

Carolyn Lee
SAFETY TRAINING: SCHEDULED SESSIONS IN MARCH

The following training courses are scheduled in March. You can find the full Safety Training programme on the Safety Training online catalogue:

https://espace.cern.ch/info-safetytraining-official/Pages/Newcourses.aspx

If you are interested in attending any of the below courses, please talk to your supervisor, then apply electronically via EDH from the course description pages, by clicking on SIGN-UP.

Registration for all courses is always open – sessions for the less-requested courses are organized on a demand-basis only. Depending on the demand, a session will be organised later in the year.

Biocell Training
19-APR-11 (08.30 – 10.00) in French
19-APR-11 (10.30 – 12.00) in French
21-APR-11 (08.30 – 10.00) in English
21-APR-11 (10.30 – 12.00) in English
26-APR-11 (08.30 – 10.00) in French
26-APR-11 (10.30 – 12.00) in French

Conduite de plates-formes élévatrices mobiles de personnel (PEMP)
28-APR-11 to 29-APR-11 (08h00 – 17h30) in French

Radiological Protection
19-APR-11 (08h30 – 12h30) en anglais

Recyclage - Conduite de plates-formes élévatrices mobiles de personnel (PEMP)
11-APR-11 (08h00 – 17h30) en français

Secourisme – Cours de base
18-APR-11 au 19-APR-11 (08h30 – 17h30 et 08h30 – 12h30) en français

Secourisme - Cours de recyclage
19-APR-11 (13h30 – 17h30) en français

Sécurité radiologique
19-APR-11 (13h30 – 17h30) en français

Sécurité chimique – Introduction
29-APR-11 (09h00 – 11h30) en français

Session in French with possibility to have the documentation in English

COURS SÉCURITÉ

« Sécurité de travail avec laser »
Session le 13 mai 2011
de 14h00 à 18h00
(en français)

À qui s’adresse ce cours ?
Ce cours s’adresse aux personnes travaillant avec des produits laser de classe 3B ou 4. Ce cours est recommandé aux personnes travaillant avec des produits laser de classe 3R, ou des lasers à faisceau divergent ou collimaté de classe 1M ou 2M.

Quel est le contenu du cours ?
Après un rappel des principales caractéristiques des différents types de lasers, l’accent sera mis sur les conditions de travail et les précautions à prendre :

* Moyens de protection : Règles de sécurité pour les différentes classes de laser - Lunettes de protection - Résistance des filtres aux faisceaux puissants - Protection de la peau.

Exemples d’utilisation des lasers au CERN.

Comment s’inscrire ?
Vous pouvez vous inscrire sur le catalogue des formations sécurité, ou en contactant Isabelle Cusato (73811).
The following course sessions are scheduled in the framework of the 2011 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

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Dates</th>
<th>Duration</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERN openlab Multi-threading and Parallelism Workshop</td>
<td>13-Apr-11 - 15-Apr-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>Dealing efficiently with Oracle Performance Issues</td>
<td>27-Apr-11 - 29-Apr-11</td>
<td>1 day</td>
<td>English</td>
</tr>
<tr>
<td>Developing secure software</td>
<td>13-May-11 - 15-May-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>Emacs - way beyond Text Editing</td>
<td>26-Jun-11 - 28-Jun-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>ITIL Foundations (version 3)</td>
<td>23-May-11 - 25-May-11</td>
<td>2 days</td>
<td>English</td>
</tr>
<tr>
<td>ITIL Foundations (version 3) EXAMINATION</td>
<td>26-May-11 - 28-May-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>JAVA - Level 1</td>
<td>29-May-11 - 31-May-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>JavaScript for web development</td>
<td>21-Jun-11 - 23-Jun-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>JCOP - Finite State Machines in the JCOP Framework</td>
<td>26-May-11 - 28-May-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>JCOP - Joint PVSS-JCOP Framework</td>
<td>13-May-11 - 15-May-11</td>
<td>4.5 days</td>
<td>English</td>
</tr>
<tr>
<td>JCOP - Joint PVSS-JCOP Framework</td>
<td>20-Jun-11 - 22-Jun-11</td>
<td>4.5 days</td>
<td>English</td>
</tr>
<tr>
<td>Object-oriented Design Patterns</td>
<td>11-Apr-11 - 13-Apr-11</td>
<td>3 days</td>
<td>English</td>
</tr>
</tbody>
</table>

**CERN ACADEMIC TRAINING PROGRAMME 2011**

Regular lecture

12, 13, 14 & 15 April 2011
from 11:00 to 12:00 (Europe/Zurich)
at CERN (222-R-001 - Filtration Plant)

Fusion ITER at CERN in 2011
D. Campbell and G. Janeschitz / ITER Organization, France

18, 19, 20 & 21 April 2011
from 11:00 to 12:00 (Europe/Zurich)
at CERN (222-R-001 - Filtration Plant)

Statistics
by K. Cranmer (NYU)

27, 28 & 29 April 2011
27 and 29 April from 11:00 to 12:00 and Thursday 28 April 2011 from 11:00 to 12:00 and from14:30 to 15:30
at CERN (222-R-001 - Filtration Plant)

Academic training

**CERN TECHNICAL TRAINING: AVAILABLE PLACES IN FORTHCOMING COURSES**

The following course sessions are scheduled in the framework of the 2011 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).
<table>
<thead>
<tr>
<th>Course</th>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle - Programming with PL/SQL</td>
<td>15-Jun-11</td>
<td>17-Jun-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>Oracle Certified Professional</td>
<td>23-May-11</td>
<td>27-May-11</td>
<td>5 days</td>
<td>English</td>
</tr>
<tr>
<td>Oracle Database SQL Tuning</td>
<td>20-Jun-11</td>
<td>22-Jun-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>Python - Hands-on Introduction</td>
<td>9-May-11</td>
<td>12-May-11</td>
<td>4 days</td>
<td>English</td>
</tr>
<tr>
<td><strong>Electronic design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altium Designer - migration for occasional PCAD users</td>
<td>03-MAY-11</td>
<td>06-MAY-11</td>
<td>3 jours</td>
<td>French</td>
</tr>
<tr>
<td>LabVIEW for beginners</td>
<td>27-Jun-11</td>
<td>29-Jun-11</td>
<td></td>
<td>Bilingual</td>
</tr>
<tr>
<td>LabVIEW FPGA</td>
<td>26-MAY-11</td>
<td>27-MAY-11</td>
<td>2 jours/days</td>
<td>Bilingual</td>
</tr>
<tr>
<td>LabVIEW Real-Time</td>
<td>23-MAY-11</td>
<td>25-MAY-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>Radiation effects on electronic parts and systems</td>
<td>12-May-11</td>
<td>13-May-11</td>
<td></td>
<td>French</td>
</tr>
<tr>
<td>TR-CIEL - Logiciel de calcul d'installations electriques BT</td>
<td>14-Jun-11</td>
<td>15-Jun-11</td>
<td></td>
<td>French</td>
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<tr>
<td>TR-CIEL - Logiciel de calcul d'installations electriques BT</td>
<td>16-Jun-11</td>
<td>17-Jun-11</td>
<td></td>
<td>French</td>
</tr>
<tr>
<td><strong>Mechanical design</strong></td>
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<tr>
<td>ANSYS - Introduction to Classical ANSYS</td>
<td>11-Apr-11</td>
<td>14-Apr-11</td>
<td>4 days</td>
<td>English</td>
</tr>
<tr>
<td>ANSYS DesignModeler</td>
<td>16-Jun-11</td>
<td>17-Jun-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>ANSYS Emag</td>
<td>11-Apr-11</td>
<td>12-Apr-11</td>
<td>2 days</td>
<td>English</td>
</tr>
<tr>
<td>ANSYS Parametric Design Language</td>
<td>22-Jun-11</td>
<td>24-Jun-11</td>
<td>3 days</td>
<td>English</td>
</tr>
<tr>
<td>ANSYS Workbench</td>
<td>2-May-11</td>
<td>5-May-11</td>
<td>4 days</td>
<td>English</td>
</tr>
<tr>
<td>AutoCAD Mechanical 2011</td>
<td>30-May-11</td>
<td>31-May-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>CATIA VS -- Drafting Advanced</td>
<td>5-May-11</td>
<td>12-May-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>CATIA-Smarteam Base 2</td>
<td>24-May-11</td>
<td>9-Jun-11</td>
<td></td>
<td>French</td>
</tr>
<tr>
<td>CATIA-Smarteam Base1</td>
<td>3-May-11</td>
<td>18-May-11</td>
<td>6 jours</td>
<td>French</td>
</tr>
<tr>
<td>Schneider: Automate Modicon Premium UNPP2</td>
<td>23-May-11</td>
<td>26-May-11</td>
<td>4 jours</td>
<td>French</td>
</tr>
<tr>
<td>Travailler en salle propre</td>
<td>26-Apr-11</td>
<td>26-Apr-11</td>
<td>1 jour</td>
<td>French</td>
</tr>
<tr>
<td><strong>Office software</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CERN EDMS MTF in practice</td>
<td>15-APR-11</td>
<td>15-APR-11</td>
<td>1 day</td>
<td>English</td>
</tr>
<tr>
<td>CERN EDMS for Engineers</td>
<td>11-APR-11</td>
<td>11-APR-11</td>
<td>1 jour</td>
<td>French</td>
</tr>
<tr>
<td>EXCEL 2007 - level 1 : ECDL</td>
<td>07-APR-11</td>
<td>08-APR-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>Migrer en douceur vers Office 2007 ou 2010</td>
<td>23-MAY-11</td>
<td>23-MAY-11</td>
<td>1 heure</td>
<td>French</td>
</tr>
<tr>
<td>Travailler avec Windows 7 au CERN</td>
<td>23-MAY-11</td>
<td>23-MAY-11</td>
<td>1 heure</td>
<td>French</td>
</tr>
<tr>
<td>Individual Coaching</td>
<td>21-APR-11</td>
<td>21-APR-11</td>
<td>1 heure/hour</td>
<td>Bilingual</td>
</tr>
<tr>
<td>Individual Coaching</td>
<td>20-APR-11</td>
<td>20-APR-11</td>
<td>1 heure/hour</td>
<td>Bilingual</td>
</tr>
<tr>
<td>Individual Coaching</td>
<td>24-Jun-11</td>
<td>24-Jun-11</td>
<td>1 heure/hour</td>
<td>Bilingual</td>
</tr>
<tr>
<td>Project Planning with MS-Project</td>
<td>02-MAY-11</td>
<td>06-MAY-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>Secure e-mail and Web browsing</td>
<td>3-May-11</td>
<td>3-May-11</td>
<td>1.5 hours</td>
<td>English</td>
</tr>
<tr>
<td>Sharepoint Collaboration Workspace</td>
<td>18-APR-11</td>
<td>19-APR-11</td>
<td>2 days</td>
<td>English</td>
</tr>
<tr>
<td>Sharepoint Collaboration Workspace</td>
<td>23-MAY-11</td>
<td>24-MAY-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>Sharepoint Collaboration Workspace</td>
<td>20-Jun-11</td>
<td>21-Jun-11</td>
<td>2 days</td>
<td>English</td>
</tr>
<tr>
<td>Sharepoint Collaboration Workspace Advanced</td>
<td>09-MAY-11</td>
<td>09-MAY-11</td>
<td>1 day</td>
<td>English</td>
</tr>
<tr>
<td>Sharepoint Designer (Frontpage) - Level 1</td>
<td>16-May-11</td>
<td>17-May-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>Sharepoint Designer (Frontpage) - Level 2</td>
<td>16-MAY-11</td>
<td>17-MAY-11</td>
<td>2 jours</td>
<td>French</td>
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<tr>
<td>WORD 2007 - level 1 : ECDL</td>
<td>11-APR-11</td>
<td>12-APR-11</td>
<td>2 jours</td>
<td>French</td>
</tr>
<tr>
<td>WORD 2007 - level 2 : ECDL</td>
<td>26-MAY-11</td>
<td>27-MAY-11</td>
<td>2 days</td>
<td>English</td>
</tr>
<tr>
<td><strong>Other courses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruiting and Sourcing using LinkedIn Live</td>
<td>20-MAY-11</td>
<td>20-MAY-11</td>
<td>3.5 hours</td>
<td>English</td>
</tr>
</tbody>
</table>

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.
MONDAY 11 APRIL

TH JOURNAL CLUB ON STRING THEORY
14:00 - TH Auditorium, Bldg. 4
TBA
P. HORAVA

TUESDAY 12 APRIL

ACADEMIC TRAINING LECTURE
REGULAR PROGRAMME
11:00 - Bldg. 222-R-001 - Filtration Plant
Fusion ITER at CERN in 2011 (1/4)
D. CAMPBELL / ITER ORGANIZATION, FRANCE

TH STRING THEORY SEMINAR
14:00 - TH Auditorium, Bldg. 4
Spectral curves and integrals over moduli spaces
B. EYNARD

WEDNESDAY 13 APRIL

HR SEMINAR
10:30 - Council Chamber, Bldg. 503
LD2IC Information session

TH COSMO COFFEE /
11:00 - TH Auditorium, Bldg. 4
New Perspective on Galaxy Clustering and Cosmology: General Relativistic Effects
J. YOO / ITP-UZH

TH BSM FORUM
14:00 - TH Auditorium, Bldg. 4
The Other Natural Two Higgs Doublet Model ~ A. WULZER / ETH ZURICH

THURSDAY 14 APRIL

TRAINING AND DEVELOPMENT
09:00 - Bldg. 593
Post Induction day training on popular IT and GS services
ENGLISH SESSION

TECHNICAL SEMINAR
09:00 - Bldg. 30-7-018 - Kjell Johnsen Auditorium
7* Forum Utilisateurs CATIA au CERN ~ J.-P. CORSO / CERN-EN-MEF-INT

ACADEMIC TRAINING LECTURE
REGULAR PROGRAMME
11:00 - Bldg. 222-R-001 - Filtration Plant
Fusion ITER at CERN in 2011 (3/4)
D. CAMPBELL / ITER ORGANIZATION, FRANCE

TRAINING AND DEVELOPMENT
14:00 - Bldg. 593
Post Induction day training on popular IT and GS services
FRENCH SESSION

TH BSM FORUM
14:00 - TH Auditorium, Bldg. 4
TBA ~ M. Buican / CERN

FRIDAY 15 APRIL

ACADEMIC TRAINING LECTURE
REGULAR PROGRAMME
11:00 - Bldg. 222-R-001 - Filtration Plant
Fusion ITER at CERN in 2011 (4/4)
D. CAMPBELL / ITER ORGANIZATION, FRANCE

PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS
14:00 - TH Auditorium, Bldg. 4
Drell-Yan production at small transverse momentum and the collinear anomaly
T. BECHER / UNIVERSITY OF BERN

MONDAY 18 APRIL

ACADEMIC TRAINING LECTURE
REGULAR PROGRAMME
11:00 - Bldg. 222-R-001 - Filtration Plant
Statistics (1/4) ~ K. CRANMER /NYU

TH BSM FORUM
14:00 - TH Auditorium, Bldg. 4
TBA ~ G. GERSDORFF /EPFL

THURSDAY 21 APRIL

ACADEMIC TRAINING LECTURE
REGULAR PROGRAMME
11:00 - Bldg. 222-R-001 - Filtration Plant
Flavour Physics and CP Violation (4/4)
DR. Y. NIR / WEIZMANN INSTITUTE OF SCIENCE, REHOVOT, ISRAEL

TH BSM FORUM
14:00 - TH Auditorium, Bldg. 4
TBA ~ G. GERSDORFF /EPFL