



Nos 25 & 26 – 23 & 30 June 2010

## Common sense codified

### CERN Code of Conduct

*Furthering Excellence at CERN through Integrity, Commitment, Professionalism, Creativity and Diversity  
Applicable from 1 July 2010*

At CERN, people of more than a hundred different nationalities and hundreds of different professions work together towards a common goal. The new Code of Conduct is a tool that has been designed to help us keep our workplace pleasant and productive through common standards of behaviour. Its basic principle is mutual respect and common sense. This is only natural, but worth driving home...

The Director-General announced it in his speech at the beginning of the year, and the Bulletin wrote about it immediately afterwards. "It" is the new Code of Conduct, the document that lists our Organization's values and describes the basic standards of behaviour that we should both adopt and expect from others. "The Code of Conduct is not going to establish new rights or new obligations," explains Anne-Sylvie Catherin, Head of the Human Resources Department (HR). But what it will do is provide a framework for our existing rights and obligations."

The aim of a common code is to provide a reference point for shared dialogue, thereby creating an atmosphere of trust and mutual respect. "The Code of Conduct is a practical guide based on common sense," confirms Director-General Rolf Heuer. And, as Catherin adds, "Setting down common standards in black and white helps to

improve reciprocal understanding and dialogue."

The Code, which was presented to the Council this week and will enter into force in July, was drawn up by HR in collaboration with external consultants and working groups representative of all the Organization's different members. "The Code is not just for CERN staff but also for users and anyone associated with achieving the Organization's mission," says Catherin.

The starting point of the Code of Conduct is the five values with which everyone at CERN can identify. "Integrity, commitment, professionalism, creativity and diversity are the values of this Organization and the basic ingredients of the Code of Conduct," confirms Rolf Heuer.

The Code of Conduct is available here:  
<https://hr-info.web.cern.ch/hr-info/docs/CodeOfConduct.pdf>

(Continued on page 2)



### A word from the DG



#### A workplace marked by respect and understanding

Integrity, commitment, professionalism, creativity and diversity: five words that each and every one of us at CERN can identify with, because they represent the core values of this Organization. That's why they have been chosen as the starting point for our new Code of Conduct, which is being launched this week.

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#### Published by:

The European Organization for Nuclear Research - CERN  
1211 Geneva 23, Switzerland - Tel. + 41 22 767 35 86

Printed by: CERN Printshop

© 2010 CERN - ISSN: Printed version: 2077-950X  
Electronic version: 2077-9518





## A word from the DG

(Continued from page 1)

### A workplace marked by respect and understanding

**A Code of Conduct describes the basic standards and rules of behaviour that we can expect in the workplace, and it is a statement of the way we see our Organization's values. CERN's mission is fundamental research in physics: pushing back the frontiers of human knowledge. In support of that mission, we drive innovation, stimulate international collaboration and inspire a rising generation of scientists. We do all this while respecting the highest ethical standards, and it is this aspect of CERN life that the Code of Conduct describes.**

**CERN's Code of Conduct has been developed through a collaborative and transparent process to foster shared appreciation of CERN's values and their influence on the way we work. It does not duplicate or extend our existing legal rights and obligations, nor is it an exhaustive list of dos and don'ts. Rather, it is a practical guide, assisting us in understanding how we conduct ourselves, treat others, and can expect to be treated in accordance with CERN values.**

**At the same time as launching the Code of Conduct, we are creating the position of Ombuds at CERN. An Ombuds is a person who is there to provide an informal route to resolution of potential conflict, and to advise on the application of the Code of Conduct. We have appointed Vincent Vuillemin into this important position, and you can read his views on the role in this Bulletin.**

**Our Code of Conduct will be a valuable tool in maintaining and developing a workplace marked by mutual respect and understanding. We should all familiarize ourselves with it and incorporate it into our daily life. By doing so we will ensure that CERN continues to pursue its mission in a manner that inspires trust and respect while maintaining a healthy and stimulating environment for all.**

Rolf Heuer

## Common sense codified

(Continued from page 1)

An information session to present the details of the new Code is organised

Friday, 25 June at 9.30 a.m. in the Main Auditorium

You are all invited to take part. The meeting will be screened live in the BE Auditorium on the Prévessin site (Building 864) and you can also watch the webcast at the following address: <http://webcast.cern.ch>.

The Spotlight on CERN video with interviews with Rolf Heuer, Anne-Sylvie Catherin and Vincent Vuillemin is also available at:

<http://cdsweb.cern.ch/record/1269320>

## LHC report

**D**uring last week the commissioning effort has been devoted to beam development work, required to accelerate beams with nominal bunch intensity to 3.5 TeV. Significant progress has been done with the commissioning of the systems required to control the beam size and bunch length during the ramp and accelerate the beam with reproducible characteristics. The setting-up of the collimation system for the operation with higher intensity is presently

**Operators are preparing the machine for physics with nominal bunch intensity towards the end of next week.**

ongoing with the aim of delivering physics with nominal bunch intensity towards the end of next week.

For more information about the LHC and a video of the presentation recently done by LHC operators, please visit:

<http://lpcc.web.cern.ch/LPCC/>  
<http://indico.cern.ch/categoryDisplay.py?categId=2687>

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## Pomeranchuk Prize awarded to André Martin

**E**stablished by the Institute of Theoretical and Experimental Physics (ITEP) in memory of an outstanding scientist Isaak Yakovlevich

**Professor André Martin has been awarded the I.Ya.Pomeranchuk Prize 2010, alongside Professor Valentine Zakharov.**

Pomeranchuk, the prize is awarded for the study of analytic properties of the scattering amplitude; which lead to the Froissart—Martin bound on the cross section growth with energy.

The prize comes as a great honor for Martin, who was in fact a good friend of Mr. Pomeranchuk, "I am surprised and delighted to learn that I will be receiving the 2010 Pomeranchuk Prize. I was an admirer of Pomeranchuk and we shared a great friendship. I met with him for the last time in Erevan (Armenia) in 1965. As a good-bye, he told me, 'Analyticity exists'. This is precisely what I proved to earn the prize".

Jordan Juras

*André Martin, CERN theorist, pictured at the ceremony held in honour of his 80th birthday (August 2009).*



# CERN gets an "Ombuds"

The word does not necessarily mean much to non-HR specialists. "Ombuds is a broad term, because an ombuds uses lots of techniques and not just pure mediation," explains Vincent Vuillemin. "If a disagreement or potential conflict arises, he talks to the people involved to get their point of view and help them. He can also provide coaching so that discussions can be conducted in a proper way. The aim is to provide people with the means to solve problems themselves."

Several companies, organizations and democratic countries have introduced the office of ombuds. At CERN, the role will enter into force at the same time as the new Code of Conduct. "The Code of Conduct is the ombuds' point of reference, the framework within which to conduct his work: he relates the circumstances of the potential conflict to the standards of behaviour and principles of mutual respect expounded in the general rules of the Code of Conduct," explains Vuillemin.

The ombuds is a different channel of communication from the official channels such as the Human Resources Department and Staff Association. His role is completely informal, neutral and impartial. "If a conflict arises, the process of coming to talk to me about it is entirely voluntary," confirms Vuillemin. "I am the first port of call for informal consultations, someone to whom people can come to explain their problem. My mandate does not allow me to take part in formal inquiries, and, although I can recommend them, I don't have the authority to request them."

**Vincent Vuillemin, previously Head of the EN Department, has been appointed CERN's first "Ombuds". According to Wikipedia, the word Ombudsman, which is of Swedish origin, means: "a person who acts as a trusted intermediary between an organization and some internal or external constituency". He is authorised to be the first person whom people can consult when it has not proved possible to resolve a potential interpersonal conflict amicably or with the assistance of the competent hierarchy.**

But informal doesn't mean without a mandate. On the contrary, the ombuds is formally mandated by the Organization to fulfil a precise role that must also comply with certain very strict obligations of confidentiality, impartiality and independence. "Within this framework, the ombuds can intervene to facilitate interpersonal relations. He becomes effective when he is able to act at the very beginning of a potential misunderstanding, of a breakdown in communication or of a conflict. Things develop in stages before they get as far as becoming fully-fledged group or individual harassment. Early intervention improves the chances of achieving a positive outcome to the conflict and reduces the number of formal inquiries, which can unfortunately leave scars behind."

It is therefore a role that is closely involved with people and as a result a very complicated one. "The ombuds must remain independent, must be capable of withstanding any pressure and must have his career behind him. He must also know how to talk to people from the very different cultural backgrounds represented at CERN. My fourteen years as a group leader or head of department have provided me with management skills that will be useful to me in this new role," concludes Vuillemin.



Vincent Vuillemin, the new CERN's Ombuds.

And he adds, "To do this job properly you have to have a gift for empathy and you need to be receptive to people's problems. Outside CERN, I am a Buddhist monk and a Zen master. I like to think that I have acquired a certain skill in managing people's problems.

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The role of the Ombuds will be further explained at the information session organized by the HR Department and the DG on

**Friday 25 June at 9.30 a.m.  
in the Main Auditorium**

You are all invited to take part. The meeting will be screened live in the BE Auditorium on the Prévessin site (Building 864) and you can also watch the webcast at the following address: <http://webcast.cern.ch>.

**Watch the Spotlight at:  
[http://cdsweb.cern.ch/  
record/1269320](http://cdsweb.cern.ch/record/1269320)**

## New arrivals

On Thursday 10 June 2010, members of CERN Management welcomed recently-recruited staff members and fellows at the second part of the Induction Programme (photographed here with Anne-Sylvie CATHERIN, Head of HR Department).

HR Department



# Respect changes your life!

"CERN has been a member of the Geneva-based association "Le respect, ça change la vie" since March," says Friedemann Eder, Head of the Relations with the Host States Service. Mutual respect, respecting the differences and the work of others, respect on the road, in the family, at school, etc. The association, which was founded in 2003 and now has a large number of members, promotes this universal value and encourages discussion on it. "CERN's history shows the importance and success of values such as international collaboration and the respect of differences," continues Eder. "These are the same values as those promoted by the association."

CERN's membership comes just as its new Code of Conduct enters into force, placing these very values on a formal footing within the Organization. "Joining the association "Le respect, ça change la vie" will enable us to share these values more effectively outside CERN, with our neighbours," explains Corinne Pralavorio, who is responsible for communication with the local community.

**CERN has recently joined the Geneva-based association "Le respect, ça change la vie" (Respect can change our lives). As its name suggests, the association promotes respect, in all its forms. This decision will enable CERN to share some of its values, those it has in common with the association, with the community at large.**



The association's logo, which sums up its philosophy, could be displayed on CERN vehicles, for example. The original logo was in French only, but the association enthusiastically agreed to design a bilingual one (see illustration) at CERN's request. "Displaying the association's logo is a way of publicly demonstrating our commitment. It promotes not only CERN's image but also the image of the people who work here, and by extension that of international civil servants as a whole. By joining the association,

CERN has signed up to a collective approach that involves many of the surrounding communes, some major companies, another international organisation and others too," says Eder.

An event to publicise CERN's membership of the association further is in the pipeline for the autumn. In the meantime, we can all start practising the principle of mutual respect, which incidentally is also mentioned in the Code of Conduct.

Alizée Dauvergne

## Respect is often about simple gestures...

A kind look  
A smile  
Saying hello  
Saying thank you  
Holding the door for someone  
Running errands for someone less able  
Helping each other

## E-njoy the first CERN Global Network e-vent!

**S**even weeks after its launch, about 600 people have already joined the CERN Global Network and six thematic groups have been created. The whole idea of joining the Network is to stay connected or reconnect with the life at CERN and seminars, talks, discussions are undoubtedly a

**Empowered by the considerable interest it received after it was launched, the CERN Global Network takes off and organizes the first e-vent, which will be a special talk on science communication that will be held on 29 June at 4.30 p.m. in the Council Chamber. You can experience it live on the Global Network site and, if you are a Member, provide feedback. Stay linked!**

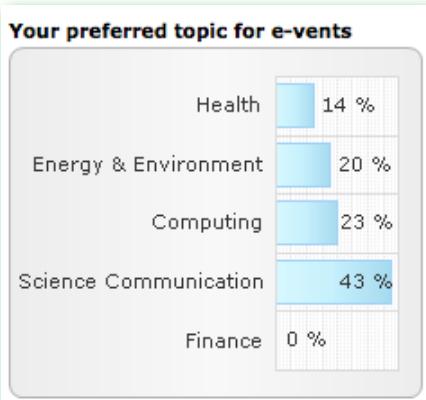
very important and much appreciated part of it. This is where the e-vents come into play. "The e-vents enable members of the Global Network to participate in selected events taking place at CERN, such as lectures or panel discussions. They will be broadcasted live through the Web, with the possibility for members of the Network to post their questions and comments before, during, as well as after the e-vent", explains Claudio Parrinello, Head of the Knowledge and Technology Transfer (KTT) Group.

The topics of the e-vents are chosen by the members who answer a poll set up on the Network webpage. For this first e-vent, users have selected the science communication topic. "To make it easier for users to take part in the e-vent and feel part of it, a discussion group will be created before, and will survive after the e-vent, and the recorded lecture will remain available on

the website", underlines Marina Giampietro, Communication Officer for the KTT Group.

The CERN Global Network vitality is directly linked to that of its members. "The CERN Global Network is designed to be a two-way tool for communication across the CERN community. Feedback and suggestions from all members are of vital importance to shape the Network in order to meet the users expectations", says Marina Giampietro. And Claudio Parrinello adds: "E-vents are a powerful illustration of how the Global Network can concretely foster knowledge transfer across the worldwide community of its members. The idea behind e-vents is that if you are not at CERN, we bring key CERN events to you, and enable you to contribute almost as if you were here!"

So, wherever you are, on June 29th at 4.30 pm (CET) connect to the CERN Global Network and watch the first e-vent on science communication. The speaker will be James Gillies, Head of the CERN Communication Group and the talk will focus on the challenge of communicating science after the LHC start-up phase.



On the CERN Global Network webpage, you will be able to choose the topic of the next e-vents.

# "Universe of Particles" opens in the Globe

**U**pon entering the dark interior of the Globe, one has a sense of emerging into a portal to

the outer universe. Large projections that fill the walls and a 6 m large diameter circle screen in the middle of the ground space swirl with stars and planets, as well as particle collisions from the LHC experiments. Questions such as where do we come from? What are the laws of Nature? Why did anti-matter and matter not destroy each other just after the Big Bang? Will we find particles that make up the mysterious dark matter or the Higgs particle? are linked to the research being done at the LHC.

Visitors are invited to explore the unique spherical stations spread around the exhibit focusing on four main themes – Why does CERN collide particles? How do we accelerate particles? (LHC), How do we detect particles? (detectors), and the diversity of CERN (worldwide collaboration, computing grid and World Wide Web, spinoff technologies, history and educational aspects). Touch screen balls allow visitors to explore ALICE, ATLAS, CMS and LHCb through virtual tours that give a sense of scale for each and explain how they work. They also show short films of detector installations.

Object balls contain exhibits related to each theme, such as a hydrogen bottle – the proton source for all of the particle accelerators at CERN, a replica of the first cyclotron made by Nobel Laureate, Ernest Lawrence in 1931, an antimatter trap and crystals from electromagnetic calorimeter detectors, to name a few. Meanwhile, visitors can observe

CERN's brand new permanent exhibition provides a high-tech experience with virtual interactive stations and pieces of actual detectors to intrigue the general public about some of the world's most sophisticated physics tools and experiments.

particles colliding every few seconds on the center circular screen. These particle collisions are reconstructed particle tracks taken from real data of the four large LHC experiments.

The Universe of Particles exhibit has been funded by Rolex and designed by Atelier Brueckner. All of the programming for the interactive features is done by IART and the CERN coordinators are Bernard Pellequer, manager of the Globe and Rolf Landua, head of CERN's Education, Visits and Exhibitions Group. "One of the highlights is the LHC table, a touch-screen device that displays an interactive map of the LHC", explained Landua.

Touching various places allows the visitor to peak underground 100 m to see where the experiments are located and how they work and by touching the play button CERN's accelerator complex comes to life showing the path of the protons from the source to the LHC.

"Thanks to this new exhibition, the Globe will play an even greater role in CERN's communication to the general public and will be the starting point for CERN visits," said Landua.

**The exhibit will be officially opened to the general public on 1 July; however, a special pre-opening will be held on 29 and 30 June for CERN staff and users to experience this new display. Visits are free with opening hours from 10:00 until 17:00, Mondays to Saturdays.**

Carolyn Lee

Watch the video presenting the exhibition:  
<http://cdsweb.cern.ch/record/1271693>



*Universe of Particles exhibition will open on 1 July in the Globe of Science and Technology.*



*Members of CERN Council and Management visit the exhibition.*



# Renovating the Main Building

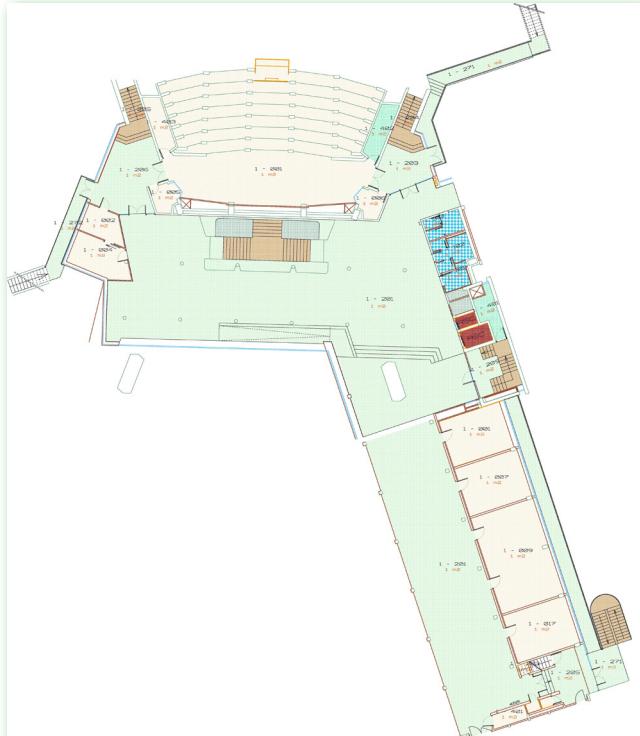
The ground floor is home to the entrance to Restaurant No. 1, the bank, the post office, the travel agent, the Users Office, the Staff Association, the notice boards etc. Step up to the first floor to access CERN's largest lecture theatre, the Council Chamber and its "Pas Perdus" lobby. Everyone who works at or visits CERN is familiar with "the Main Building", in reality a hotchpotch of different buildings (500, 501, 503, 60, 61) all constructed at different times in CERN's history (see box).

CERN's "Main Building" is exactly that. The Organization's central hub, with hundreds of staff and visitors passing through its doors every day, will soon be getting a well-earned facelift. Refurbishment work will proceed in phases, starting with the Salle des Pas Perdus, the concourse between the Council Chamber and the Main Auditorium. By the end of August, informal seating areas will be installed, electronic display panels will provide practical information and improved sound insulation will enhance conditions in the auditoria and surrounding meeting rooms.

specialised in building renovation. The building materials, furniture and paintwork have all been carefully selected to create a warm and friendly atmosphere. A work of art donated to CERN by sculptor Antony Gormley will take pride of place, suspended over the main stairwell."

renovation of the Main Building will be done in phases. After the first-floor concourse, we hope to go on to renovate the ground floor." But such a project will take time and money to set up, and will therefore probably have to wait until next year.

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In light green the area that will undergo the facelift. Work will start in July.

Although the Main Building meeting rooms have been refurbished at various times and equipped with state-of-the-art facilities, other areas such as the first-floor concourse and main staircase have never really enjoyed such tender loving care. "It's high time we started giving these areas a facelift. Behind this consolidation drive is the increased need to optimise the available space together with practical issues such as better sound insulation in the corridors to enhance working conditions in the adjacent meeting rooms," says Myriam Veyrat, who has been appointed by the Directorate to run the project.

Other key aspects of the project include a fresh lick of paint on the walls, new floor coverings and a renovated gallery of portraits of CERN's former Director-Generals. Myriam adds: "We're working with firms

Not only will these areas be more convivial but they will be far more welcoming for visitors who aren't necessarily familiar with the Laboratory. "Screens will be installed at strategic points to display essential information such as the location of rooms, their occupancy, meetings in progress, etc. Each meeting room will also be equipped with a screen displaying detailed information. The same applies to the Building 60 lifts, which will also be replaced," Myriam Veyrat explains.

Sigurd Lettow, Director of Administration and Infrastructure adds: "The

## Renovation Work on the Main Building

The first floor of the Main Building will be inaccessible on the 2 July until the 31 August for renovation.

This work includes:

- The renovation and the enlargement of the toilets. The toilets available will be situated on the ground floor next to the entry of the cafeteria.
- The renovation of the large elevator. The second floor elevator will be available for all floors, except for the first floor (the button is disconnected).

A sign for the building sight will be put up and there will be a marked path for those going to the restaurant via the gateway.

We thank you for your understanding.



The sculpture "Feeling Material XXXIV" donated to CERN by the sculptor Antony Gormley. It will be suspended over the main stairwell.  
(Antony Gormley  
FEELING MATERIAL XXXIV, 2008  
5mm square section mild steel bar  
155 x 244 x 153 cm  
Photograph by Stephen White, London  
© the artist)

# CERN's first female firefighter

Séverine, who comes from Gap in France, took up her post as a firefighter in the CERN fire brigade at the beginning of April. "We were looking for a new member," explains David Peyron, Head of the Fire and Rescue Service. It didn't matter if it was a man or a woman; we needed a firefighter with the right skills, and Séverine just happened to have them."

With ten years experience working in French fire services, Séverine was looking for a new challenge. "What attracted me to CERN was the international dimension, because that creates additional challenges," she explains. And these can be considerable! For one thing, every country has its own way of working, its own equipment and its own drills. "For example, in France we unroll

Until recently, the women's changing room in the Fire Station, built in 2005, has always been empty. With the arrival of Séverine Peverelly, CERN's first female firefighter, it now has a purpose.

the hoses from the fire towards the fire engine, whereas in Italy they do it the other way round. So, common procedures are needed to ensure that interventions are as efficient as possible." Then there's the language barrier. The 50 firefighters in the brigade represent 10 different nationalities. That's nothing unusual at CERN but the nature of the job accentuates the problems. "First of all you have to master the technical terms," says Séverine. And then there are the physiological constraints. You might be in the dark, in a smoke-filled area, wearing breathing apparatus. Even if you can't hear or see each other very well, you still have to be able to communicate. For that, everyone has to know each other well, hence the importance of exercises and community life."

Séverine spent her first month being introduced into the fire brigade's four different teams (see box), before joining her permanent team at the beginning of May. When asked if being a woman, the first in the brigade, got in the way of her becoming part of the team, she simply replies, "Here, I'm not a woman, I'm a firefighter! I do sport and drills

## The teams in the brigade

The CERN fire brigade is divided into four teams: the purple team, which Séverine has joined, and the blue, red and green teams. Each team has a team leader, a deputy, three leading firefighters and five other firefighters. They are divided up so as to ensure a good nationality balance and, above all, a good balance of expertise. Each team has a paramedic, a breathing apparatus specialist, a Hazardous Environments Response Team specialist, a radiation protection specialist, a first aid supervisor, etc.



Séverine Peverelly took up her post as a firefighter in April.

just like my colleagues. There's no difference, except for my changing room, which is separate. I've had no problem settling in." What's more, her colleagues are delighted that she has joined the brigade, as her supervisor, Pierre-Louis Dolmazon, testifies: "Diversity is important in our Service, so the arrival of a female firefighter was a logical step. To draw a parallel, Séverine's arrival has been like the discovery of a particle. There was much excitement and a lot of speculation before she got here. This was followed by a period of observation. Now, we can use our discovery to move forward". Marc Chataigneau, Group Administrative Officer, sums up the general feeling when he says, "I hope there will be more Séverines!"

Alizée Dauvergne

## France at CERN

The exhibition France at CERN, organized by UBIFRANCE in collaboration with CERN's GS/SEM (Site Engineering and Management) service, took place from Monday 7 to Wednesday 9 June in the Main Building. The 36 French firms taking part came to present their products and technologies related to the Organization's activities. The next exhibition will be "Netherlands at CERN" in November.

Alizée Dauvergne



Rolf Heuer, CERN Director General, visits the exhibition "La France au CERN".

# CernDOC, a fertile ground for the web's inception

The CERNDOC initiative was pitched in the early eighties by the DD division (now the IT division) as a solution for sharing and

storing documentation produced by the physicists and engineers at CERN. At this point in time, the central computing facilities were based on IBM mainframes. Although PCs, Macintoshes and laser printers did not yet exist, network development was already active. "BITNET provided the networking capacity necessary for the IBM VM/CMS platform and it was employed by the CERNDOC project. The VM/CMS operating system provided users with private virtual machines on which they could create or retrieve documents that were stored on a documentation server", recalls Eric Van Herwijnen, CERNDOC project leader. "Drawing on the client-server system developed at the Rutherford-Appleton Lab (Sysdoc), CERNDOC provided users with the ability to manage documents on their individual virtual machines".

CERNDOC was a very powerful system for retrieving information but there were factors that impeded upon its ease of use: "Documents could only be retrieved by

It is widely acknowledged that the World Wide Web took its first steps towards success at CERN. However, lesser well known is that earlier in the 80s, CERN teams had already developed CERNDOC, a very advanced documentation system, and one of the first to implement the client-server model. This same idea was later used in the development of the Web.

sending a request to the server and it did not include a browser interface", says Eric. "CERNDOC was supported by a language that did not make use of hyperlinks, rendering it impossible to link documents together. One had to select documents from the database in order to view them".

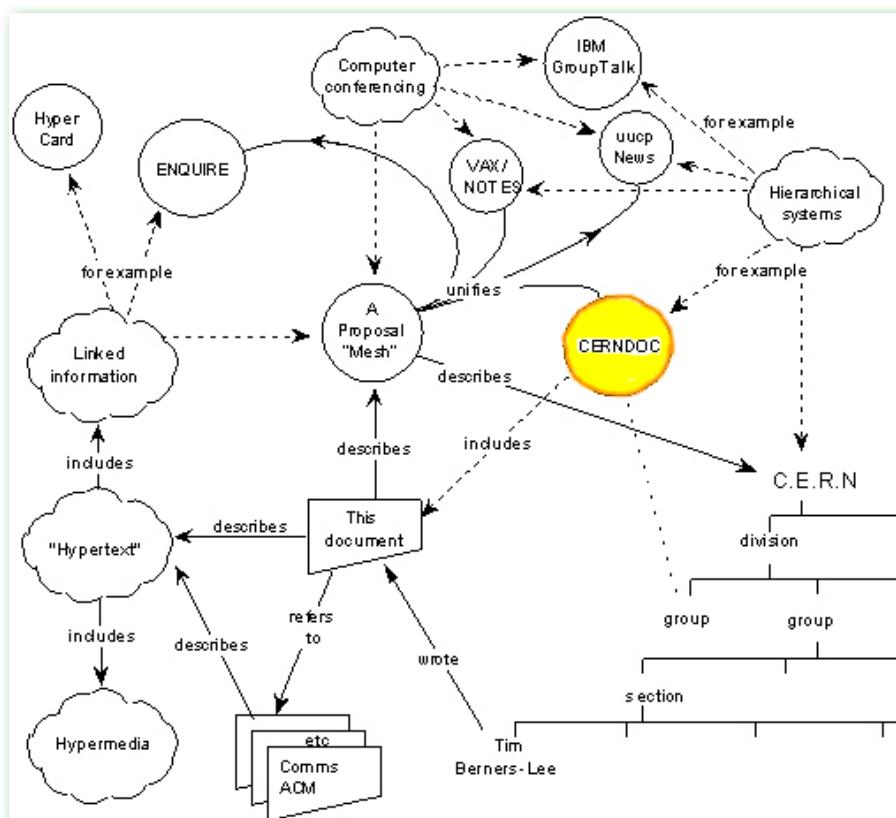
"When we started to implement the system, we decided to use the Standard Generalized Markup Language (SGML)" explains Eric. "At the time, it was the language we were instructing people to use on our mainframes. It was a meta language that IBM had standardized for text processing. It did not directly contain processing instructions and it had to be translated to represent the text processing commands that it contained. CERNDOC pioneered the idea of storing documents using an application independent interchange format allowing them to be displayed on different client platforms." As a result of the complexity of the SGML language, it was not used for the Web. Rather, Tim Burners-Lee used features from a

number of SGML implementations to create a more simplified language, the HTML, which included an anchor for hypertext links and did not depend on a Document Type Definition (see box).

As the Web started to gain a good reputation within the physics community, CERNDOC and SGML were faced with a big problem – the dawn of the PC era. "All of a sudden, PCs became much more popular than IBM VM/CMS," describes Eric. "Slowly, we moved first to Suns, then to PCs and Macintoshes,. The world went "What You See is What You Get" thanks to Microsoft Word and Adobe PDF became the de facto document interchange format. You could say CERNDOC and SGML died at the same time."

Although CERNDOC did not meet a very successful fate, it contained ideas that proved to be an important stepping-stone in the path to the development of the WEB.

Jordan Juras



## Document Type Definition

A Document Type Definition or a DTD is a required component when using an SGML-type meta language. It is a set of markup declarations that define a document type and provides instruction for which elements will appear in a document and where. XML is a simplified version of SGML.

The scheme used by Tim Berners-Lee to present the web. In yellow, the CERNDOC box.



## News from the Library Literature in electrical engineering

**L**ooking for a technical standard on software reviews and audits? Is it referred to as "IEEE color books"? Want to download and read NOW the latest version of IEEE 802? Whenever a need for a technical standard or specification arises in your activity, the Library is here to serve you. For IEEE standards it is particularly easy; the whole collection is available for immediate download.

Indeed, since 2007, the CERN Library offers readers online access to the complete IEEE Electronic Library (Institute of Electrical and Electronics Engineers). This licence gives unlimited online access to all IEEE and IET journals and proceedings, starting from the first issue. But not everyone knows that this resource gives also access to all current IEEE standards as well as a selection of archival ones.

The Library is now working on the integration of a selection of these standards in our online catalogue, the CERN Document Server (CDS): <http://cdsweb.cern.ch>.

Please don't hesitate to contact [tullio.basaglia@cern.ch](mailto:tullio.basaglia@cern.ch) to let us know which IEEE standards you consider the most relevant for your work and therefore you would like us to catalogue in CDS.

The Library provides in addition a large collection of standards from other publishers such as AFNOR, ISO or IEC available on CDS. If you need standards not held in the Library, just contact us, we can order it immediately on your behalf and you'll get the electronic version in the coming hours. List of IEEE standards arranged by subject:

[http://tiny.cc/ieee\\_standards](http://tiny.cc/ieee_standards).

More information about IEEE Electronic Library: <http://ieeexplore.ieee.org>  
CERN Library

# Accelerator shielding experts meet at CERN

**T**his was the most attended meeting of the series with more than 65 participants from 34 institutions and 14 countries. "We welcomed experts from many different laboratories around the world. We come from different contexts but we face similar problems. In this year's session, among other things, we discussed ways for improving the effectiveness of calculations versus real data, as well as experimental solutions to investigate the damage that radiation produces on various materials and the electronics", says Marco Silari, Chair of the conference and member of the DGS/RP group.

Fifteen years after its first CERN edition, the Shielding Aspects of Accelerator, Targets and Irradiation Facility (SATIF) conference was held again here from 2-4 June. Now at its 10th edition, SATIF10 brought together experts from all over the world to discuss issues related to the shielding techniques. They set out the scene for an improved collaboration and discussed novel shielding solutions.

direct measurements, which generates different and confusing experimental data. However, we also observe that predictions relevant for material properties are becoming more and more essential for future projects. We are thinking of setting up a dedicated session about these topics at the next conference".

The objectives of SATIF10 included promoting the exchange of information, identifying the areas where international cooperation can be fruitful, and recommend actions to support the need for international work on theoretical models, experimental work and benchmarking.

"We have achieved our goals", confirms Marco Silari. "The book of proceeding will soon be made available to all the participants thus keeping the momentum of the conference. We are also thinking of producing an Accelerator Shielding Handbook, but this is a topic for the future meeting, which will be held in Japan in about two years".

*CERN Bulletin*

For more information about SATIF10, please visit:

<http://www.cern.ch/SATIF-10>

## Film Presentation: *Die Urknallmaschine*

An Austrian film by Gerd Baldauf, will be presented by Norbert Frischau (Alpha Österreich - ORF, 2009).

In CERN's gigantic complex particles are accelerated to almost the speed of light, brought to collision and made to divide into even smaller particles. Public opinion of CERN's research is also divided. Sceptics fear that black holes may be created. Might the goal to study the origin of the world lead to its destruction? The Austrian researcher Norbert Frischau worked at CERN for many years. With his guidance it is possible to explore the world's largest research centre, get a glimpse of the fascinating work the scientists do there and take a crash course in particle physics.

*Die Urknallmaschine* will be presented on

Friday, 25 June from 13:00 to 14:00  
in the Main Auditorium. Language: German

# A new record for CERN: Photon accelerates to 85 km/h!

**A** single hull of aircraft material to reduce weight, a roof of photovoltaic panels for energy and three wheels to propel itself to 85km/h ... Photon is a prototype electro-solar vehicle. Approved under the term "electric tricycle", it was created by the CERN Solar Club, with assistance from the School of Technical Trades (ETM) in Geneva. "We started developing the first version of Photon in 1986", says Jean Donnier, one of its designers and also a founding member of the club. "Since then we have changed Photon 4 times. Photon has kept the form and competed on 19 June in the race entitled "The Cyprus Institute-Solar Car Challenge 2010. It has already participated in many races, Switzerland, Austria and France, where he won in Paris. But he is a veteran of 25 years!", exclaimed William van Sprollant, team leader for the preparation of Photon. "To prepare ourselves for the rules of the race, we have had to make some modifications to improve

**Three members of the CERN Solar Club recently took their solar car "Photon" to Cyprus to compete in a race held on 19 June.**

the safety of our vehicle: we added a safety cage and a belt, two circuit breakers to cut the two sources of energy (solar and battery Lithium-Polymer) from the cockpit, etc."

With the club's president, Paulus Gelissen, these three passionate about ecology have been on their way to Cyprus since June 11, with Photon on its trailer. "We decided to travel with my car, because with three it is more ecological", justifies Paulus. "Attending an event that promotes renewable energy by sending Photon as cargo, and us arriving in a plane would not have been consistent!"

On June 19, it is William who drove the engine under the sun of Cyprus, facing six other participants in the race. We wish him luck and will give you the results of the race in an upcoming issue!

## A club for the environment

The focus of the Solar club, is not only solar, but environmental. For example, William imagined and built DOROTHEE, a device to recover oil from water, the idea was to make DOROTHEE available at the oil spill in the Galapagos Islands in January 2001. "I had already imagined the concept 32 years ago, when the oil spill from the Amoco Cadiz occurred. Still thinking ecologically, the machine could not just be created with anything: "It is made of recycled material from CERN experiments. For example the two cylinders come from the experiment CHARM, the beams and other pieces come directly from the recycled zone located at building 133." Explains Paulus

"It is made of recycled material experiments at CERN. For example, two cylinders come from experience CHARM beams and other pieces come directly from the recovery zone located in Building 133," said Paulus. "Since I have successfully tested DOROTHEE in France in Brest in the Centre d'Expérimentations de Documentation et de Recherche sur les pollutions accidentelles des Eaux (CEDRE). The advantage of this machine is that it is very selective, recovering 10,000 litres of oil an hour, with less than 5% water. William and Paulus have offered to make DOROTHEE available for the oil spill in the Gulf of Mexico.

Alizee Dauvergne



Jean Donnier (left), William van Sprollant (centre) and Paulus Gelissen (right) starting at CERN (Photo courtesy P. Gelissen).



The solar panel that powers Photon.

# A more modern look for the Council Chamber exhibition

The presentation is simple and elegant. The content is based essentially on the accelerators and the aim of the graphic design is not to attract the public's attention to the panels but rather to provide a pleasant

**When the Council Chamber was renovated, the old photographs displayed on the walls were taken down... they've now been replaced by new panels printed on Plexiglas. The theme of the exhibition is still the history of CERN, but it now features the very latest from graphic design. Fabienne Marcastel, who designed it, tells us more.**

décor for the Chamber's users. "The old photographs stopped at the LEP. The new

panels show the history of CERN but also what the Laboratory is like today. Visually, the plan is the starting point, the key to understanding how CERN has changed. It shows how CERN occupies the land it is built on," explains Fabienne Marcastel, the exhibition's graphic designer.

The four panels are mounted on Plexiglas, and their "presence" in the Chamber is very low key. "We wanted something light and not an exhibition that necessarily draws the eye," explains Marcastel. "There are no large headings to distract people's attention, and the texts, in English and French, are deliberately designed to be read from close up. Plexiglas has already been used in the Chamber to hide the wires and microphones. It gives a particular form to the space around the lecterns, which is reflected in the shape and material of the panels."

The first Council meetings in the completely renovated Chamber featuring the new exhibition have just taken place.

CERN Bulletin



Two of the new panels recently installed in the Council Chamber.



## Official news

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.

## ELECTIONS TO THE SENIOR STAFF ADVISORY COMMITTEE ("THE NINE") 2010

The electronic voting process for the Senior Staff Advisory Committee ("The Nine") was closed on Monday 7 June. Of the 443 Senior Staff members eligible to

vote, 197 voted. This represents a participation of 44% compared to 57% in 2009, 53% in 2008, 63% in 2007, 64% in 2006 and 66% in 2005. The results are:

### Electoral group 1

Candidate	Department	Votes
Michael Doser	PH	130 - ELECTED

### Electoral group 2

Candidate	Department	Votes
Sylvain Weisz	DG	91 - ELECTED
Jean-Jacques Gras	BE	66 - ELECTED
Miguel Marquina	IT	46
Mauro Nonis	EN	40
Hans Muller	PH	26
Gerard Tranquille	BE	24
Emilio Meschi	PH	16

The elected persons are Michael Doser (PH) for Electoral Group 1, Sylvain Weisz (DG) and Jean-Jacques Gras (BE) for Electoral Group 2. Their mandate is from July 2010 to June 2013.

The Committee will now consist of these newly elected members together with Sudeshna Datta Cockerill (HR), Doris Forkel-Wirth (DG), Erk Jensen (BE), Jose Miguel Jimenez (TE), James Purvis (HR), and Pippa Wells (PH). Pippa Wells will also be the new spokesperson from 1 July 2010.

My sincere congratulations to all the new elected members. I would also like to thank all other candidates for standing for election, as well as Reinoud Martens, the Polling Officer.

Alberto Pace  
Spokesperson of the Nine



**Take note**

Save lives  
Give your blood



**On Thursday 1<sup>st</sup> July 2010  
From 9.00 to 17.00**

### BLOOD DONATION

Organized by the Cantonal Hospital of Geneva

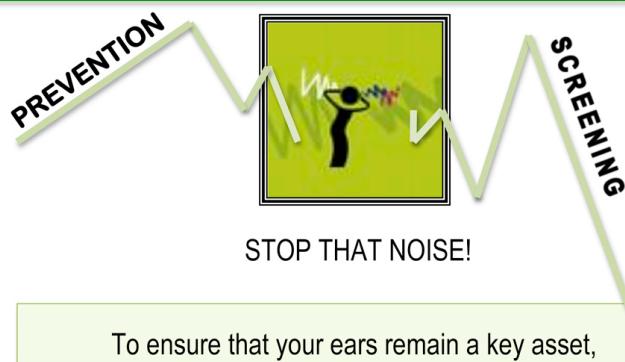
**CERN - Main building  
1<sup>st</sup> floor – Room : Pas Perdus**

**Number of donations during the last blood donation campaign:**

- **126 donors** in november 2009
- **152 donors** in March 2010

*GS Department*

**Let's do better !!!**  
**Give 30 minutes of your time**  
**to save lives...**



To ensure that your ears remain a key asset, CERN's nurses invite you to come for:

### A HEARING CHECK-UP

**From 12 to 16 July 2010**

At the Infirmary, Bldg. 57

**From 9 a.m. to 4 p.m.**

- Hearing Tests
- Advice
- Information
- Documentation
- Hearing Protection



*Available to everyone working on CERN premises*

### RECYCLING: PET/ALU

Two containers are now at your disposal near Building 133 and Building 904:

- \* one for PET (plastic bottles);
- \* one for Aluminium cans.



## CERN TECHNICAL TRAINING: AVAILABLE PLACES IN FORTHCOMING COURSES

The following course sessions are scheduled in the framework of the 2010 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

JAVA - Level 2	05-JUL-10	08-JUL-10	English	4 days
JCOP - Finite State Machines in the JCOP Framework	22-JUN-10	24-JUN-10	English	3 days
Le Langage C (ANSI et C99)	24-JUN-10	02-JUL-10	English	4 days
Oracle - Programming with PL/SQL	28-JUN-10	30-JUN-10	English	3 days
Project Development using Python	29-JUN-10	02-JUL-10	English	4 days

### Electronic design

CAO = Allegro Design Entry HDL Front-to-Back Flow v16.3	28-JUN-10	30-JUN-10	French	3 jours
LabVIEW Communication with RADE applications	01-JUL-10	02-JUL-10	English	2 days
Managing Software Engineering in LabVIEW	08-JUL-10	09-JUL-10	English	2 days
LabVIEW Data Acquisition and Signal Conditioning Course	05-JUL-10	07-JUL-10	French	3 jours
Siemens - STEP7 : level 1	22-JUN-10	25-JUN-10	French	4 jours

### Mechanical design

ANSYS Workbench	15-JUL-10	18-JUL-10	English	4 days
CATIA V5 – Surfacique 1	25-JUN-10	28-JUN-10	French	2 jours
Schneider: Automate Modicon Premium UNP7D	28-JUN-10	30-JUN-10	French	3 jours

### Office software

EXCEL 2007 (Short Course I) - HowTo... Work with formulae, Link cells, worksheets and workbooks	22-JUN-10	22-JUN-10		
Bilingual	0.5 day			
EXCEL 2007 (Short Course II) - HowTo... Format your worksheet for printing	28-JUN-10	28-JUN-10	Bilingual	0.5 day
EXCEL 2007 (Short Course III) - HowTo... Pivot tables	28-JUN-10	28-JUN-10	Bilingual	0.5 day
Get the most of Office 2007!	21-JUN-10	21-JUN-10	English	2 hours
Get the most of Office 2007!	23-JUN-10	23-JUN-10	French	2 heures
Individual Coaching	21-JUN-10	21-JUN-10	Bilingual	1 hour
OUTLOOK 2007 (Short Course II) - Calendar, Tasks and Notes	22-JUN-10	22-JUN-10	Bilingual	0.5 day

### Special course

VGStudio MAX	22-JUN-10	24-JUN-10	English	3 days
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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.



## Technical training

### OFFICE SOFTWARE INDIVIDUAL COACHING

If one or several particular topics cause you sleepless nights, you can get the help of our trainer who will come to your workplace for a multiple of 1-hour slots. All fields in which our trainer can help are detailed in the course description in our training catalogue (Microsoft Office software, Adobe applications, i-applications etc.)

Please discover these new courses in our catalogue!

<http://cta.cern.ch/cta2/f?p=110:9>

Technical Training Service  
[Technical.Training@cern.ch](mailto:Technical.Training@cern.ch)  
 Tel 74924

Marie-Laure LECOQ 74924  
 ENSEIGNEMENT TECHNIQUE  
 TECHNICAL TRAINING  
[technical.training@cern.ch](mailto:technical.training@cern.ch)



## Language training

### FRENCH COURSES FOR BEGINNERS

French courses for beginners (level 0) will take place from 12 July to 27 August 2010.

- Timetable:  
 Mondays, Tuesdays, Wednesdays, Thursdays  
 (11.00 to 13.00 or 13.30 to 15.30)
- Duration: 56 hours (8 hours a week)
- Price: 728 CHF

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

<http://cern.ch/Training>

or contact Mrs. Dumeaux : Tel. 78144.

[nathalie.dumeaux@cern.ch](mailto:nathalie.dumeaux@cern.ch)



## Seminars

### MONDAY 21 JUNE

#### TH INSTITUTES

08:00 - TH Auditorium, Bldg. 4

#### Perturbative higher-order effects at work at the LHC - HO10

#### ACADEMIC TRAINING LECTURE REGULAR PROGRAMME

11:00 - Main Auditorium, Bldg. 500

#### Higgs Boson Searches at Hadron Colliders (1/4)

K. JAKOBS / UNIVERSITY OF FREIBURG

### MONDAY 21 JUNE

#### TH JOURNAL CLUB ON STRING THEORY

1400 - Bldg. 1-1-025

#### TBA

L. FERRO / ANNECY

#### IT INFORMATICS TUTORIAL

15:30 - Bldg. 593-R-011

#### Get the most of Office 2007! (EN)

P. GRZYWACZEWSKI / CERN

### TUESDAY 22 JUNE

#### CERN JOINT EP/PP SEMINARS

11:00 - Council Chamber, Bldg. 503-1-001

#### Recent QCD results from D0

S. LAMMERS / INDIANA UNIVERSITY

#### ACADEMIC TRAINING LECTURE REGULAR PROGRAMME

11:00 - Main Auditorium, Bldg. 500

#### Higgs Boson Searches at Hadron Colliders (2/4)

K. JAKOBS / UNIVERSITY OF FREIBURG



# Seminars

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## WEDNESDAY 23 JUNE

### TH COSMO COFFEE

11:00 - Bldg. 1-1-025

**TBA**

G. DVALI / CERN

### ACADEMIC TRAINING LECTURE REGULAR PROGRAMME

11:00 - Main Auditorium, Bldg. 500

### Higgs Boson Searches at Hadron Colliders (3/4)

K. JAKOBS / UNIVERSITY OF FREIBURG

### TH THEORETICAL SEMINAR

14:00 - TH Auditorium, Bldg. 4

### Recent Advances in Precision QCD for the LHC

L. DIXON / SLAC

### 37TH MEETING OF THE INTC

10:00 - Salle Andersson, Bldg. 40-S2-A01

### Open Session

P. BUTLER / UNIVERSITY OF LIVERPOOL

### COMPUTING SEMINAR

15:00 - Bldg. 6-2-024

### A Distributed Cloud-Scale Execution Framework For Data

L. LONERGAN / GREENPLUM SOFTWARE

### IT INFORMATICS TUTORIAL

15:30 - Bldg. 593-R-011

### Profitez bien de Office 2007! (FR)

B. LENSKI / CERN

### WORKSHOP CERN/CAEN

14:30 - Bldg. 13-2-05

### CAEN Digital Pulse Processing Workshop

## THURSDAY 24 JUNE

### ACADEMIC TRAINING LECTURE REGULAR PROGRAMME

11:00 - Main Auditorium, Bldg. 500

### Higgs Boson Searches at Hadron Colliders (4/4)

K. JAKOBS / UNIVERSITY OF FREIBURG

### TH BSM FORUM

14:00 - Bldg. 1-1-025

### Solving the mu problem with a heavy Higgs boson

R. FRANCESCHINI / EPFL

### TH STRING THEORY SEMINAR

16:00 - TH Auditorium, Bldg. 4

### TBA (note special day and time)

H. VERLINDE / PRINCETON UNIVERSITY

## FRIDAY 25 JUNE

### DETECTOR SEMINAR

11:00 - Salle Bohr, Bldg. 40

### Giant Liquid Argon TPCs for Neutrino Physics and Proton Decay - Status and Challenges

A. RUBBIA / CERN

### PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - TH Auditorium, Bldg. 4

### HO10 TH Institute

## MONDAY 28 JUNE

### TH JOURNAL CLUB ON STRING THEORY

14:00 - Bldg. 1-1-025

### Automorphic Forms in String Effective Actions

N. LAMBERT / CERN & KING'S COLLEGE LONDON

## TUESDAY 29 JUNE

### SPSC

09:00 - Council Chamber, Bldg. 503

### Provisional agenda for the 97th Meeting of the SPSC

C. VALLEE / CPPM-MARSEILLE

### TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

**TBA**

M. SCHMIDT-SOMMERFELD

### CERN GLOBAL NETWORK E-VENTS

16:30 - Council Chamber, Bldg. 503-1-001

### Science communication

J. GILLIES / CERN

## THURSDAY 1 JULY

### CERN COLLOQUIUM

16:30 - Bldg. 222-R-001

### Massive data, the digitization of science, and reproducibility of results

V. STODDEN / Postdoctoral Associate in Law and Kauffman Fellow in Law

## FRIDAY 2 JULY

### PARTICLE AND ASTRO-PARTICLE PHYSICS SEMINARS

14:00 - TH Auditorium, Bldg. 4

### HO10 TH Institute and LHC Physics Day

### TH STRING THEORY SEMINAR

14:00 - TH Auditorium, Bldg. 4

### TBA (note special day)

J. MALDACENA