

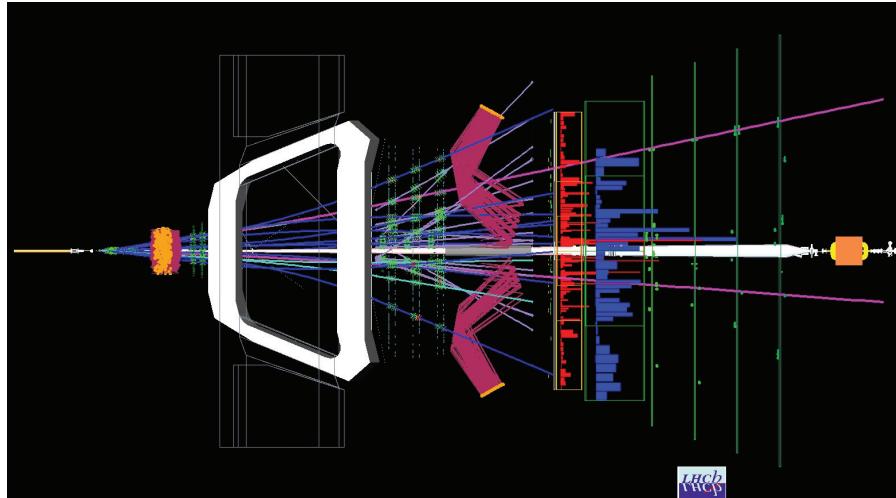


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## Is it a triangle?



**In the theory of the Standard Model, the masses, interactions and physical states of quarks – the basic constituents of matter – are described mathematically by a matrix known as the Cabibbo-Kobayashi-Maskawa (CKM) matrix. Three angles enter into the definition of the elements of the matrix. If their sum is not 180°, new physics might be the reason.**

The LHCb experiment at CERN has measured precisely for the first time at a hadron collider one of the three angles – the “gamma” angle – so far known with the largest uncertainty.

It's a matter of angles: if their sum is not exactly 180°, the geometric shape is not a triangle. And if the angles are those related to the CKM matrix, we enter the realm of physics beyond the Standard Model. Experiments at B-factories have measured the three angles –  $\alpha$ ,  $\beta$  and  $\gamma$  – but, given in particular the large uncertainty of  $\gamma$ , constraints on new physics are still far from robust.

After several months of accurate analysis of data collected in 2011, the LHCb collaboration has been able to improve the precision measurement of the gamma angle, achieving an accuracy which matches that of the B-factory experiments, adding new crucial information for the global fits to CKM variables.

The measurement is the result of a complex analysis (see box) that studies various hadronic decays of the B particle. “In this first phase, we have included three different decay modes in the analysis,” says Pierluigi Campana, the LHCb spokesperson. “Soon we should be able to add several new channels and by the end of next year we plan to complete the analysis of the 2012 data that we are still collecting.”

Antonella Del Rosso

(Continued on page 2)



### Ready, set, logo!

Over recent months, you might have noticed a crisp new look beginning to appear at CERN, our vehicles carry uniform branding, signage is being refreshed and slowly but surely, everything from letterheads to websites is coming into line with CERN's new graphic charter, which we're now giving an official launch.

(Continued on page 3)

### In this issue

#### News

Is it a triangle?	1
A word from the DG	1
LHC Report: A tough restart	2
The Grid is open, so please come in...	3
ESO celebrates 50 years of "Euro-astronomy"	4
1970: ESO arrives at CERN	5
New researchers for applied physics	6
Space- and ground-based particle physics meet at CERN	6
A "Grand Night Out" at the Laboratory	7
One photo to rule your phone	8
News from the Library: Trial access to Springer Engineering e-books	8

#### Take note

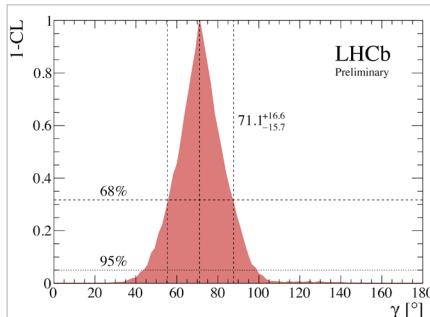
Official news	9
Technical Training	10
Seminars	11
Management and communication training	11

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## Is it a triangle?



*LHCb plot of the confidence level of the signal as a function of gamma, for the combination of B-DK modes. The peak of the distribution gives the measured central value and the width gives the error.*

## Angles, paths and decays

Quantum physics allows particles to decay to the same final state but through different paths. The probability of these decay modes is directly related to the way quarks mix and interact with each other during the transition. The various paths are mathematically related to the  $\gamma$  angle through a term known by physicists as "interference". Given the high accuracy of its apparatus and the very good performance of the LHC, the LHCb collaboration has been able to detect the various decay modes of the B particle with high statistics and thus high precision. Using only B-DK results, an unambiguous best-fit value of  $\gamma = (71.1 + 16.6 - 15.7)$  deg. has been determined.

Information from B-D $\pi$  decays has also been included in a combination for the first time. When this information is included, the best-fit value becomes  $\gamma = 85.1$  deg, and the allowed ranges are  $[61.8; 67.8]^\circ$  or  $[77.9; 92.4]^\circ$  at 68% confidence level.

*Antonella Del Rosso*

## LHC Report: A tough restart

**The third LHC Technical Stop of five days took place in the week of September 17. Getting back to normal operation after a technical stop can sometimes be difficult, with debugging, testing and requalification required on the systems that have seen interventions. Folding in a selection of other problems can make for a frustrating time.**

The restart experienced over the last days was one of the tougher ones. Many problems occurred, both small and large, one after the other; in the end it took until Sunday afternoon, 9 days after the end of the technical stop, to have a physics fill in the machine that delivered an initial luminosity similar to those before the technical stop. Most problems encountered were, in fact, not related to the technical stop.

The technical stop consisted of the usual maintenance and consolidation of the various systems, but two items stand out: the replacement of the mirrors and supports of the Beam Synchrotron Light Monitors (BSRTs), which had to be put out of operation because of heating by the beam; and the replacement of one fast-pulsed kicker magnet used to inject the beam. The injection magnets have also suffered from beam-induced heating, sometimes resulting in a delay of the injection process of up to several hours during a good running period. In total there are eight of these magnets in the machine. The 'hottest' of these was replaced during the technical stop with a new version of the magnet with improved impedance reduction measures. The machine will gain some up-time from this replacement,



*The new injector magnet is transported to the LHC.  
Photo: TE/ABT group*

and allow the new design to be checked under operational conditions. The injection magnet replacement was carefully planned and managed successfully in four and a half days, requiring around the clock work from all the teams involved.

Then the series of unfortunate events started: on Friday afternoon, 21 September, right at the end of the technical stop, the cryogenics in Point 8 was stopped by a technical fault. It took until Sunday for the cryogenic conditions to allow operation with beam to be re-established. Monday was spent with the standard test ramp with pilot beams to check the correct functionality of the LHC coming back from the technical stop. Commissioning with beam continued normally until Tuesday when a transformer switch on the external electrical network resulted in a glitch which caused another cryogenics trip, this time in Point 2. The cryogenics system recovered overnight (from Tuesday to Wednesday) and the planned vacuum cleaning with beam of the newly installed injection magnet could finally start.

Some 13 hours of dedicating 'scrubbing' with beam were required to improve the vacuum conditions in the newly installed magnet. This was followed by the normal ramp-up in the number of bunches in the machine: a first fill had 452 bunches per beam in the machine, next 840 bunches and finally 2 fills with 1374 bunches per beam before nominal operational conditions were re-established on Sunday 30 September. Beam time during this ramp-up in intensity was interrupted by an earth fault on a quadrupole power converter due to a water leak that took 8 hours to be resolved, and a problem with an Uninterruptible Power Supply (UPS) on Saturday, which took out another 12 hours of beam time.

Since then, the LHC has been back to normal physics production, interrupted only on Monday 1 October for tests with 25 ns spaced bunches. This will continue until Monday 8 October when a five-day machine development period will start. The good news is that the newly installed injection magnet heats significantly less than the other injection magnets installed and it provides important positive information for the application of similar measures to the other injection magnets in the machine during the long shutdown in 2013 - 2014.

*Jan Uythoven for the LHC team*

# The Grid is open, so please come in...

During the week of 17 to 21 September 2012, the European Grid Infrastructure Technical Forum was held in Prague. At this event, organised by EGI (European Grid Infrastructure), grid computing experts set about tackling the challenge of opening their doors to a still wider community. This provided an excellent opportunity to look back at similar initiatives by EGI in the past.

EGI's aim is to coordinate the computing resources of the European Grid Infrastructure and to encourage exchanges between the collaboration and users. Initially dedicated mainly to high-energy particle physics, the European Grid Infrastructure is now welcoming new disciplines and communities. The EGI Technical Forum is organised once a year and is a key date in the community's calendar. The 2012 edition, organised in Prague, was an opportunity to review the advances made and to look constructively into a future where the use of computing grids becomes more widespread.

Since 2010, EGI has supported the largest virtual research community in the field of life sciences, formed around the WeNMR project. The aim of WeNMR is to set up an e-infrastructure based on IT and communication technologies, with a view to democratising the use of the nuclear magnetic resonance (NMR) and small-angle X-ray scattering (SAXS) techniques, which probe the internal organisation of biological molecules (NMR) and the structure and surfaces of such molecules (SAXS). Structural biology techniques like these call for powerful computational resources. "WeNMR aims to place the computing tools required for NMR and SAXS at the disposal of a wide community," explains Alexandre Bonvin, the WeNMR project leader and member of EGI's External Advisory Committee (EAC). "We want to show people what computing grids can offer so that they can be used by researchers across Europe and beyond. Today we have about 450 users around the world." This community specialised in



structural biology collaborated naturally with EGI. Alexandre Bonvin adds: "The computing grids we have built in the WeNMR project are based on the same software as EGI, which enabled us to integrate them easily into EGI. It was important for us to get EGI recognition and be able to respond to specific requests but it was also important for EGI because we were the vehicle for integrating a new, active user community."

Ever since its inception, EGI has shown it is capable of opening up to a variety of disciplines. Other initiatives such as the EGI Champions illustrate its desire to grow and diversify its user community. "Last week at the EGI Technical Forum, we launched the EGI Champions scheme," says Steve Brewer community manager for EGI and the EGI Champions scheme. "The purpose of this new scheme is to identify and encourage enthusiastic grid users and help them act as ambassadors to attract the attention of new users and new communities." The selected ambassadors commit themselves to acting in this role for 18 months and in doing so will receive support for attending conferences, technical briefings and similar events. "They can be researchers or research coordinators," Steve Brewer adds, "but they must fulfil three key criteria - be experienced in the use of grid infrastructure, enthusiastic about its future potential and willing to share their enthusiasm and experience with new communities."

Caroline Duc



## A word from the DG

(Continued from page 1)

### Ready, set, logo!

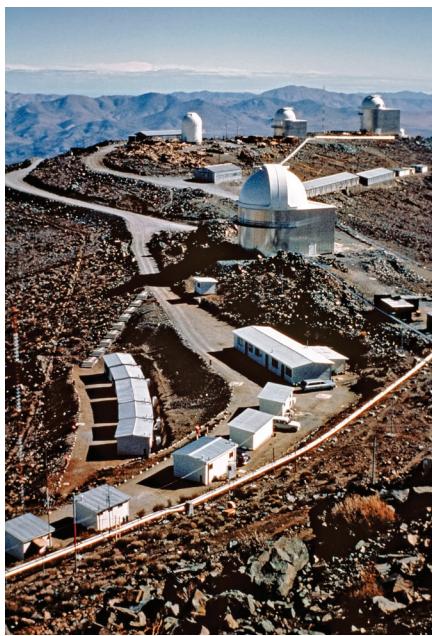
The visual image we project carries an important message about CERN to the world, and as our visibility grows it's increasingly important for that message to be that CERN is a modern and innovative organization with a clear sense of its own identity. This is something our founding fathers understood – it was they who developed the original CERN logotype, which has stood the test of time and today forms the cornerstone of our graphic charter. Full details of the charter, its rules and applications, as well as templates for all kinds of stationery can be found here: <http://design-guidelines.web.cern.ch/>

A graphic charter is a living resource that will evolve along with the Organization. Adoption of the charter will allow us to project a clean and coherent image to the world, worthy of the fundamental values of the Organization. Our design guidelines and logo symbolise who we are, and I strongly encourage you to use them. In short, it's time for ready, set, logo!

Rolf Heuer

# ESO celebrates 50 years of “Euro-astronomy”

Today the European Southern Observatory is celebrating its 50th anniversary. This article retraces the story of one of Europe's greatest laboratories, which came into being with CERN's support and assistance.



*La Silla, June 1968. The three telescopes in the background are (from left to right): the Grand Prism Objectif (GPO, first light in 1968), the ESO 1 metre telescope (1966), and the ESO 1.5 metre telescope (1968). They have been decommissioned. The white dome closest to the viewer is the ESO 1 metre Schmidt telescope, which began work in 1971. Image: ESO/E. Maurice.*

In the spring of 1953, in Leiden in the Netherlands, a group of astronomers including Walter Baade, Jan Oort, Adriaan Blaauw, Otto Heckmann and Jan Bannier (who was then President of CERN's Provisional Council) for the first time discussed the possibility of founding a European space observatory. The objective was to build it in the southern hemisphere where there were very few observatories with powerful telescopes.

Almost 10 years later, on 5 October 1962 - exactly 50 years ago to the day!\* - representatives of five European countries (Belgium, France, Germany, the Netherlands and Sweden) met in Paris to bring this project to life by signing the European Southern Observatory (ESO) Convention. ESO's Convention was largely inspired by the CERN Convention, as the two organisations were similar and some of the ESO Council members were also members of the CERN Council. Indeed, ESO and CERN are still the two participating organisations of the same pension fund.

The following year, Otto Heckman, the then ESO Director-General, concluded an agreement with the Chilean government with a view to building the observatory 2,400 m

above sea level on the La Silla site in the mountainous region of Chile's Atacama Desert. November 1966 saw the commissioning of ESO's first telescope, which had a diameter of 1 metre. 20 years later the Very Large Telescope (VLT), the world's largest optical telescope, was officially inaugurated.

In 1970 ESO and CERN signed a collaboration agreement. This was quickly followed by the setting-up of the Telescope Division and the installation of ESO's Sky Atlas Laboratory at CERN in Geneva. It wasn't until 1980 that all ESO's departments were brought together at the present site in Garching, near Munich in Germany. And it is in Garching that the 50th anniversary celebrations are taking place today. As the current ESO Director-General Tim de Zeeuw proudly observed at the beginning of the year: "At the dawn of 2012, our 50th anniversary year, we are ready to enter a new era, one that not even the initial bold dreams of ESO's founding members could have anticipated. Extremely large telescopes will seek to answer some of humanity's most demanding questions. This is undoubtedly one of the most exciting moments for astronomers and especially for the astronomers of ESO's Member States."

\*CERN celebrated its **58th** anniversary on 29 September this year.



*La Silla, today. This photograph shows two new telescopes. The silver dome is that of the MPG/ESO 2.2 metre telescope, which has been in operation since early 1984. On the far left is the Danish 1.54 metre telescope, in use since 1979. Image: ESO/E. Maurice.. Image: ESO/E. Maurice.*

## ESO and its 15 Member States

**1962:** the five founding states, Belgium, France, Germany, the Netherlands and Sweden, sign the ESO Convention.

**1967:** Denmark becomes the sixth Member State.

**1982:** Switzerland and Italy become members of ESO.

**2001:** Portugal accedes to membership of ESO.

**2002:** the United Kingdom becomes the 10th Member State.

**2004:** Finland becomes a Member State.

**2007:** Spain and the Czech Republic accede to ESO.

**2009:** Austria signs.

**2010:** Brazil signs the accession agreement. It will soon become the first non-European Member State.

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*Don't miss the article devoted to ESO's 50th anniversary in the latest edition of the CERN Courier. The article includes further details of the links between ESO and CERN.*

*ESO has made a documentary to celebrate its 50th anniversary: "Europe to the Stars — ESO's first 50 years of Exploring the Southern Sky". For more information and to watch the film, visit: [www.eso.org](http://www.eso.org).*

*More information on the history of ESO can be found in the book entitled "The Jewel on the Mountaintop", and in the illustrated publication "Europe to the Stars".*

*And you can also visit ESO's official 50th anniversary web site: <http://eso.org/public/outreach/50years.html>*

Anaïs Schaeffer

# 1970: ESO arrives at CERN

In 1970, CERN and ESO signed a collaboration agreement for the construction of the Observatory's first telescope. That same year, ESO's Telescope Division and Sky Atlas laboratory settled on the CERN site in Meyrin. Let's turn back to the beginnings of this lasting and fruitful alliance.

## Martin Cullum, ESO physicist from 1973 to 2009

“ In 1974, when I attended my first international conference on behalf of ESO, the first thing people asked was: “Where are you from?” “ESO,” I would say. The response: “What on Earth is ESO?” Nowadays, people I meet seem to know more about ESO than I do! It is clear that ESO profited enormously from its sojourn at CERN.

The wise decision of the ESO Director General at the time, Adriaan Blaauw, to move to Geneva allowed ESO to build up its technical expertise to be able to build world-beating projects like the VLT, which has undoubtedly been the most exciting scientific and technical milestone in my career.

One of the lasting impressions I had on arriving at CERN in 1973\* was the openness of the Organization. Neckties were definitely looked down upon as a sign of a sales representative. Here, everyone knew that Nobel Prize physicists wore jeans and sweaters.

Returning to CERN now, I am always amazed at how little CERN has changed since 1980. The old ESO buildings here are just as they were, and the overall impression has stayed the same.”

\*Martin Cullum worked at CERN from 1973 to 1980.

## Klaus Banse, ESO software engineer from 1977 to 2012

“ Initially, I was hired to help our astronomers programme their own algorithms for data reduction. But when I arrived in Geneva, where I stayed for about two and a half years, I took over work on the software control system for the ESO measuring machines.

This control system was written in the programming language Forth, but had the disadvantage of breaking down from time to time and there was no reproducible cause. Other times it would run smoothly... So, there I was, sitting in my office, with a beautiful view of Mont Blanc (depending on the weather), and fighting with a real-time system written in a language I soon hated, trying to find the errors in a code that caused the system to die in a random fashion. Then a young Swiss contractor, who disliked Forth as much as I did, persuaded me not to try fixing the existing code but to rewrite the complete system from scratch in assembler language instead. Fortunately, I did that. It took much more time but the system became very solid and was used routinely at ESO from that time onwards.”

## Robert Andrew Fosbury, ESO astronomer from 1978 to 2010

“ When I was with ESO at CERN in 1978-79, I was an ESO Fellow. My time at ESO since then (1985-2010) was spent as an ESA employee in the Space Telescope European Coordinating Facility (ST-ECF, a joint ESO/ESA activity). For the last 5 years I was head of the ST-ECF. I am now an ESO Emeritus Astronomer.

I had the chance to watch ESO grow from a young(ish) observatory shaped by the limited ambitions of European astronomers to what could be regarded as the leading ground-based observatory on the planet. In retrospect, this was a fascinating experience for me and when I look at the resulting infrastructure it takes my breath away.

One of my most enduring memories of my period at CERN was to do with food. There is no doubt that the canteens at CERN were an experience - and far, far better than the possibilities offered here in Garching. I remember one of the chefs in particular: he was large, happy and, I think, Italian. He would sing “Lasagne!” at the top of his voice and slap a large (delicious!) portion on the plate before handing it over with a wink. This does not happen in Germany...”

Anaïs Schaeffer

# New researchers for applied physics

On 12 September, thirteen PicoSEC researchers met in Lyon for the first time, at the project's kick-off meeting. The meeting was the opportunity for them to get to know each other and start building a fruitful working and human relationship. A hard task awaits them: reaching the 200-picosecond-limit on time resolution in photon detectors.



The 13 researchers recruited for the PicoSEC project and the organizers of the project, September 2012.

Photon detectors are used in many different fields ranging from high-energy physics calorimetry for the future generation of colliders to the photon time-of-flight technique for the next generation of PET scanners. Within the PicoSEC EU-funded Marie Curie Initial Training Network, 18 Early Stage Researchers and 4 Experienced Researchers

are being trained to develop new detection techniques based on very fast scintillating crystals and photo detectors.

In a multi-site project like PicoSEC, in which 11 institutes and companies from 6 European countries are involved, the quality of teamwork is fundamental. At the kick-off

meeting the 13 researchers (out of the 22 that will be recruited) had the opportunity to start teaming up. "The kick-off meeting was a multicultural experience in itself," says Etienne Auffray, the PicoSEC Network Coordinator. "We have researchers from all over the world, many of them from different cultural backgrounds. They have had an opportunity to meet and get to know each other, laying down the groundwork for their future cooperation."

The kick-off meeting was followed by two days of training in crystals and scintillation, jointly organized by FiberCryst SA and CERN. "I didn't expect there to be so much to learn, but I'm glad that I was given this unique opportunity to learn new things," says Mythra Varun Nemallapudi, a freshly hired PicoSEC researcher at CERN.

The researchers will have many other chances to meet each other again, but the most difficult part, the first meeting, is over. As French gourmets would say, "La mayonnaise a bien pris!"

Rita Giuffredi, PicoSEC project

# Space- and ground-based particle physics meet at CERN

The fourth international conference on Particle and Fundamental Physics in Space (SpacePart12) will take place at CERN from 5 to 7 November. The conference will bring together scientists working on particle and fundamental physics in space and on ground, as well as space policy makers from around the world.



One hundred years after Victor Hess discovered cosmic rays using hot air balloons, the experimental study of particle and funda-

mental physics is still being pursued today with extremely sophisticated techniques: on the ground, with state-of-the-art accelerators like the LHC; and in space, with powerful observatories that probe, with amazing accuracy, the various forms of cosmic radiation, charged and neutral, which are messengers of the most extreme conditions of matter and energy. SpacePart12 will be the opportunity for participants to exchange views on the progress of space-related science and technology programmes in the field of particle and fundamental physics in space.

SpacePart12 will open with a keynote speech by Nobel Laureate Jim Cronin, who will revisit the history of cosmic ray physics and discuss its deep links with the birth of

CERN. Two special public evening events are expected to attract a large audience: the lecture by Ed Stone, the scientist in charge of NASA's Voyager programme and the lecture by Bill Gerstenmaier, associate director for NASA's Human Space Flight and for the International Space Station.

SpacePart12 will be an opportunity to celebrate a century of particle physics by reviewing the status of the field, with a particular focus on the open issues and on the role that space- and ground-based studies of the various forms of cosmic radiation could have in shedding light on the dark sides of our Universe. During the last decade, the growth rate of contributions to the understanding of our Universe from results provided by spaceborne observa-

tories has been outstanding. In addition to the US, Russia, Europe and Japan, new players - most notably China, but also India and Korea - are taking leading roles in this field.

The conference will bring together leading researchers from around the world and from diverse sub-fields of physics, namely astroparticle physics and astrophysics, which have common interests in elementary particles and fundamental interactions. The conference programme will include talks from leading scientists as well as leading representatives of the international space community, covering science, technology and strategies for the future.

For detailed programme information, logistics and registration, please visit the conference website at: <http://cern.ch/spacepart12>.

CERN Bulletin



Victor F. Hess with a ionization chamber, 1960. (Credits: VF Hess Society, Echophysics, Schloss Pöllau/Austria).

## A "Grand Night Out" at the Laboratory

To mark the European Researchers Night on Friday 28 September 2012, many scientists from the LHC and its experiments came to share their knowledge with young enthusiasts from the local area and further afield.



"This third European Researchers Night at CERN attracted over 250 young people aged between 13 and 18," reports Laëtitia Pedroso (Communications Group), one of the organisers of the event. "No fewer than 77 volunteers made themselves available to give these young people a very special user-friendly evening!" Their visit included meeting scientists, activities, learning about new things and, who knows, perhaps the inspiration to become a scientist.

The participants, who were selected on the basis of the reasons they gave for wanting to participate, had a once-in-a-lifetime

opportunity to spend two or three hours alongside the researchers. They visited the CERN Control Room or one of CERN's experiments, ALICE, ATLAS, CMS, TOTEM or LHCb. The students were shepherded around on their interactive visits by volunteer scientists who made the event as entertaining as possible for the young people by organising activities suitable for the age groups concerned. While the older children were identifying particles created in collisions at ATLAS, for example, the youngest ones were reconstructing a jigsaw puzzle of an accelerator at the CCC.

Those who had really got the bug were able to extend the experience by visiting SM18, accompanied by scientists who helped to build the LHC, and by meeting women physicists at the permanent exhibitions. "There was a great sense of enthusiasm amongst these young people, whether they came from the local area or from far afield," notes Corinne Pralavorio, who is in charge of communications with the local area. "Many of them consulted the volunteers from the Human Resources Department who provided them with careers and training information."

Thanks to social networks and an effective publicity strategy, the latest European Researchers Night at CERN was extremely well attended including by young people from further afield than in the past. Some of the young people had travelled from Norway, the United Kingdom or Turkey, some even travelling more than 2,000 km over a weekend for this once-in-a-lifetime experience at the Laboratory.

This evening of shared experiences left its mark on the young people as well as the volunteers. The students left starry-eyed while the volunteers, fired with enthusiasm, were happy to have shared their passion for research.

Caroline Duc

## One photo to rule your phone

Have you ever seen those black-wide squares (picture below) called "Quick Response Codes"? Such QR tags are the two-dimensional forms of EAN codes (International Article Number, the black-white bars scanned at Migros' check-outs) encoding a web address. Scanning those codes with your smart phone can lead you to a webpage, send an SMS or an e-mail depending on the contents of the tag. Beautiful, isn't it? But wait. Can you trust that QR tag? What if the QR tag leads to something malicious? Just to add more fun, we have recently heard about a vulnerability for Android devices prior to version 4.1.1 on its so-called "USSD code handling".

The USSD code allows a phone to be reset or a SIM card to be blocked. Combined with clicking on a malicious link or tagging a malicious QR tag, this is a lethal combination that can convert your phone into a useless brick.

In the past, we've suggested to "Stop - Think - Click!" before browsing webpages, clicking on strange links or opening email attachments. In this respect, QR tags are not very different from web-links provided by URL shortening services like "bit.ly" or "tinyurl.com" \*. You are blind to where those links lead you to. Thus, using a QR tag might compromise your mobile phone like a bad link might infect your PC. So beware! Just as you should take care what links you click, only tag QRs from sources you trust!

Take advantage of your mobile's preview feature to understand what the QR tag contains, and only continue when you are comfortable. Many mobile phones provide you with a pop-up window with the QR tag's content which you have to approve.

In fact, this is where the aforementioned Android vulnerability comes in... Please test whether you are affected at this site: <https://security.web.cern.ch/security/testussd.html>. A confirmation window should pop up if all is fine and you should just click on "Cancel". Otherwise, your "IMEI" code will be displayed immediately: your Android phone is affected. We recommend you update to version 4.1.1, if possible, or STOP - THINK - CLICK.

\* If you would like to shorten a CERN URL, check out IT's newest service. Visit: [cern.ch/go](#)



Computer Security Team

News from the Library

## Trial access to Springer Engineering e-books - test it and let us know!

**The ambition of a state-of-the-art research library is obviously to shape its collections to meet the needs of the different communities of readers that it serves.**

To this end, we try to expand our (e-)book collections to provide better coverage of subject areas where such a development is needed. The good news is that the CERN community now has the opportunity to access the whole collection of engineering e-books published by Springer between 2005 and 2012.

The trial period ends on 30 November 2012 and will help us to monitor usage and better shape our collections accordingly.

Please send questions and feedback to [library.desk@cern.ch](mailto:library.desk@cern.ch).

CERN Library



## Take note

### CHANGES IN THE E-MAIL POLICY FOR PEOPLE WITHOUT CERN AFFILIATION

**When affiliated with CERN, every computing account owner is entitled to have a CERN mail address (e.g. "John.Doe@cern.ch"). However, up to now, this mail address was still valid even after the end of a person's affiliation if the owner declared an external email address (e.g. "John.Doe@gmail.com") to which all personal CERN emails (i.e. those sent to "John.Doe@cern.ch") could be forwarded.\***

As a result, to use our John Doe analogy, John could continue to write and receive emails ostensibly on behalf of CERN despite the fact that he is no longer a member of the personnel or subject to the CERN Staff Rules and Regulations and the Computing Rules. It is doubtful whether this makes sense.

Therefore, in agreement with departments and LHC experiments at the last ITS/IR meeting, all CERN email addresses of people whose affiliation has been terminated more than six months ago will be deactivated on 15 October 2012. For all others, including future leavers, CERN email addresses will be kept in accordance with the normal grace periods, i.e. six months after end-of-affiliation. All affected persons were informed in September 2012 and asked to renew their affiliation if they want to maintain their CERN email address. Current CERN retirees are not affected, for now.

\* Nothing will change for those affiliated with CERN as this is particularly useful for those of you who normally use an email service outside CERN, be it with your home institute or with Google, and rarely use the CERN one. CERN staff, however, should refrain from using this feature as the data protection level of the external mail provider is not necessarily as high as CERN's. In addition, there are implications for CERN's privileges and immunities as an intergovernmental organisation (see our Bulletin article on "Don't let your mail leak"). Please spare us from deploying technical restrictions on this.

The CERN Computer Security Team  
in collaboration with the CERN Mail Service

### VACCINATION AGAINST SEASONAL INFLUENZA: A REMINDER

**At this time every year the Medical Service suggests that you should get vaccinated against seasonal flu.**

We would like to remind you that vaccination is the best method of protecting yourself and others against this contagious illness which can have serious consequences for certain people, especially those suffering from chronic medical conditions (e.g. chronic pulmonary, cardiovascular or kidney disease or diabetes), pregnant women, people suffering from obesity ( $BMI > 30$ ) and those over 65.

As the Medical Service does not supply the vaccine, you must purchase it from a pharmacy (in France you don't need a prescription). From the beginning of October you can then bring your vaccine to the Infirmary (Building 57-Ground floor) and get vaccinated without an appointment between 9 a.m. and 12 a.m. and 2 p.m. to 4:30 p.m.

For the purposes of health insurance reimbursement, you can get a prescription from the Medical Service either on the day of the injection or beforehand.

Medical Service



## Official news

### REMINDER: EXTENSION/SUPPRESSION OF ALLOWANCE FOR DEPENDENT CHILDREN AGED 20 to 25

Members of the personnel with dependent children aged 20 to 25 (or reaching 20 during the 2012/2013 school year), for whom an allowance for dependent children is currently paid, are invited to provide the Education fees service with a **SCHOOL CERTIFICATE**.

Unless we receive, by October 31, 2012 at the latest, a school certificate or similar written proof (contract of work placement, sandwich courses or apprenticeship) covering your child / children for the school year 2012/2013, we will be obliged to stop payment of the allowance for dependent children as well as affiliation to the health insurance at the appropriate date and retroactively if necessary.

Education fees service - HR/CB-B

### REMINDER - COMPLIANCE WITH OPERATIONAL CIRCULAR NO. 2 (REV. 1) ON "CONDITIONS OF ACCESS TO THE FENCED CERN SITE"

The purpose of Operational Circular No. 2 (Rev. 1) is to contribute to the protection of people and property by defining the conditions of access to the Organization's fenced sites.

The behaviours that cannot be tolerated under any circumstances are: use of CERN access cards by people, other than the cardholders themselves, in order to gain access to facilities without having attended the required safety course; speeding, particularly on Route Gregory and Route Weisskopf; driving in and out of the site on the wrong side of the road; parking on spaces set aside for the disabled; nuisance parking, especially in the proximity of the restaurants; dumping of wrecked vehicles.

As the aforementioned instances of non-compliance can lead to dangerous situations, the Organization reserves the right to apply the penalties provided for under paragraph 26 of Operational Circular No. 2 (Rev. 1), namely to refuse access to the site to people and/or their vehicles deemed to be in infringement of the circular.

HR Department

### ELECTIONS TO THE SENIOR STAFF ADVISORY COMMITTEE ("THE NINE") 2012

The electronic voting process for the Senior Staff Advisory Committee ("The Nine") was closed on Friday 31 August at 17h30.

Of the 451 Senior Staff members eligible to vote, 277 voted. This represents a participation of 61%, to be compared to 43% in 2011, 44% in 2010, 57% in 2009, 53% in 2008, 63% in 2007, 64% in 2006 and 66% in 2005.

The elected persons (Michael Benedikt, Francois Duval and Tim Smith for Electoral Group 1&2 and Angela Goehring-Crinon for Electoral Group 3) have started their mandate in early September 2012.

The Committee will now consist of these newly elected members together with Michael DOSER (PH), Jean-Jacques GRAS (BE), Marcello MANNELLI (PH), Jean Philippe TOCK (TE) and Sylvain WEISZ (DG). Jean-Jacques GRAS will also be the new spokesperson as from 1 September 2012.

My sincere congratulations to all the new elected members and thanks all other candidates for standing for election, as well as Alberto PACE, the Polling Officer.

José Miguel Jimenez, Spokesperson of the Nine  
(2011-12)



## TECHNICAL TRAINING

If you would like more information on a course, or for any other inquiry/suggestions, please contact [Technical.Training@cern.ch](mailto:Technical.Training@cern.ch)

Valeria Perez Reale, Learning Specialist, Technical Programme Coordinator (Tel.: 62424) Eva Stern and Elise Romero, Technical Training Administration (Tel.: 74924)

HR Department

### Electronic Design

Comprehensive VHDL for FPGA Design  
Foundations of Electromagnetism and Magnet Design (EMAG)  
Impacts de la suppression du plomb (RoHS) en électronique  
Introduction to VHDL  
LabVIEW Real Time and FPGA

Next Session	Duration	Language	Availability
08-Oct-12 to 12-Oct-12	5 days	English	3 places
14-Nov-12 to 27-Nov-12	6 days	English	20 places
26-Oct-12 to 26-Oct-12	8 hours	French	15 places
10-Oct-12 to 11-Oct-12	2 days	English	7 places
13-Nov-12 to 16-Nov-12	5 days	French	5 places

### Mechanical design

ANSYS - Introduction à ANSYS Mechanical APDL  
ANSYS CFX.  
ANSYS: Introduction à ANSYS Workbench Mechanical  
Cours avancé ANSYS Workbench  
SmarTeam - CATIA data manager at CERN  
Travailler en salle propre

Next Session	Duration	Language	Availability
04-Feb-13 to 07-Feb-13	4 days	English	7 places
10-Dec-12 to 13-Dec-12	32 hours	English	6 places
08-Oct-12 to 11-Oct-12	4 days	French	3 places
05-Nov-12 to 08-Nov-12	4 days	English	2 places
22-Oct-12 to 24-Oct-12	3 days	English	2 places
15-Nov-12 to 15-Nov-12	8 hours	French	21 places

### Office software

ACCESS 2010 - niveau 2 : ECDL  
CERN Document Server (CDS), Inspire and Library Services  
CERN EDMS - Introduction  
CERN EDMS for Local Administrators  
MS Project - niveau 1  
MS Project - niveau 2  
PowerPoint 2010 - Niveau 2  
Sharepoint Collaboration Workspace - niveau 2  
WORD 2010 - niveau 1 : ECDL  
WORD 2010 - niveau 2: ECDL

Next Session	Duration	Language	Availability
08-Nov-12 to 09-Nov-12	2 days	French	9 places
23-Nov-12 to 23-Nov-12	4 hours	French	9 places
19-Oct-12 to 19-Oct-12	8 hours	French	5 places
22-Oct-12 to 23-Oct-12	2 days	English	7 places
16-Nov-12 to 23-Nov-12	12 hours	English	3 places
30-Nov-12 to 30-Nov-12	8 hours	English	10 places
15-Nov-12 to 15-Nov-12	1 day	French	5 places
08-Oct-12 to 09-Oct-12	2 days	French	5 places
12-Nov-12 to 13-Nov-12	2 days	French	6 places
22-Oct-12 to 23-Oct-12	2 days	French	7 places

### Software and system technologies

C++ Part 1 - Hands-On Introduction  
CERN openlab / Intel Parallelism, Compiler and Performance Workshop  
Création de sites avec Drupal  
Google/CERN openlab tutorial on advanced performance monitoring  
Hadoop Masterclass  
Hadoop for Administrators  
Hadoop for Developers

Next Session	Duration	Language	Availability
05-Nov-12 to 08-Nov-12	4 days	English	2 places
30-Oct-12 to 01-Nov-12	3 days	English	40 places
23-Oct-12 to 24-Oct-12	16 hours	English	One more place
17-Oct-12 to 18-Oct-12	8 hours	English	42 places
06-Nov-12 to 06-Nov-12	8 hours	English	23 places
07-Nov-12 to 09-Nov-12	24 hours	English	7 places
12-Nov-12 to 16-Nov-12	40 hours	English	One more place

ITIL Foundations (version 3)  
Intermediate Linux System Administration  
Introduction to Databases and Database Design  
Introduction to Linux  
Introduction to Linux System Administration  
Oracle - SQL  
Python - Hands-on Introduction  
Secure coding for Perl

05-Nov-12 to 07-Nov-12	3 days	English	7 places
15-Nov-12 to 21-Nov-12	5 days	English	One more place
20-Nov-12 to 21-Nov-12	2 days	English	6 places
30-Oct-12 to 01-Nov-12	3 days	English	4 places
15-Oct-12 to 18-Oct-12	4 days	English	3 places
21-Nov-12 to 23-Nov-12	3 days	English	7 places
19-Nov-12 to 22-Nov-12	4 days	English	8 places
22-Oct-12 to 22-Oct-12	8 hours	English	8 places



## Seminars

### FRIDAY 12 OCTOBER

DETECTOR CHALLENGES AT CLIC, CONTRASTED WITH THE LHC CASE

**11:00 to 12:00 (Europe/Zurich) at CERN ( 40 S2-A01 Salle Andersson )**

DR. ERIK VAN DER KRAAIJ (CERN)

### SATURDAY 13 OCTOBER

**09:15 to 16:30 Globe Colloque trans-frontalier TPE - TM Globe 1st Floor**

CHOUKROUN, GENEVIÈVE  
COLONGO, CHRISTIAN  
DUBOZ, VALÉRIE  
DE PANFILIS, SUSANNA  
PELLEQUER, BERNARD  
SAISON-MARSOULLIER, SANDRINE

### 14-27 OCTOBER

MISCELLANEOUS

**08:00 - 14 October**

**18:00- 20 October Ühenädalane füüsikaópetajate koolitus CERNis**

HEKTOR, ANDI  
MUENTEL, MAIT | CERN

2012 ASIA-EUROPE-PACIFIC SCHOOL OF HIGH-ENERGY PHYSICS: AEPSHEP2012

**12:00 -14 October**

**12:00- 27 October Luigans Resort, Fukuoka, Japan**

FIRST INTERNATIONAL SCHOOL ON LASER APPLICATIONS

**18:00 -14 October**

**14:00- 19 October**

PROF. WELSCH, CARSTEN | DR. LECESNE, NATHALIE

GANIL (GRAND ACCÉLÉRATEUR NATIONAL D'IONS LOURDS) BD HENRI BECQUEREL BP 55027 - 14076 CAEN CEDEX 05 FRANCE

### TUESDAY 16 OCTOBER 16

TH STRING THEORY SEMINAR

**14:00 Recent Developments and Open Problems in the Fluid/Gravity Correspondence**

YARON OZ (TEL AVIV UNIVERSITY)  
CERN ( 4-3-006 - TH CONFERENCE ROOM )

### WEDNESDAY 17 OCTOBER

TH STRING THEORY SEMINAR

**11:00 Pseudo-Goldstones as Dark Matter**

YARON OZ (TEL AVIV UNIVERSITY)  
CERN ( 4-3-006 - TH CONFERENCE ROOM )

TH THEORETICAL SEMINAR

**14:00 TBA**

KATHERINE FREESE (UNIVERSITY OF MICHIGAN)  
CERN ( 4-3-006 - TH CONFERENCE ROOM )

### THURSDAY 18 OCTOBER

COLLIDER CROSS TALK

TTH AT ATLAS AND CMS

**11:00 to 12:00 (Europe/Zurich)**

RICARDO JOSE MORAIS SILVA GONCALO (UNIVERSITY OF LONDON (GB)), KEVIN PATRICK LANNON (UNIVERSITY OF NOTRE DAME (US))

CERN ( 4-2-011 - TH COMMON ROOM )

A&T SEMINAR

EXPERIENCE OF HIGH INTENSITY OPERATION IN THE BROOKHAVEN AGS

**14:15 to 15:15 (Europe/Zurich)**

PROF. HAIXIN HUANG (BNL)

CERN ( 30-7-018 - KJELL JOHNSEN AUDITORIUM )

### TUESDAY 23 OCTOBER

TH STRING THEORY SEMINAR

**14:00 Non-geometric fluxes, non-geometry, and non-commutativity**

DAVID ANDRIOT  
CERN ( 4-3-006 - TH CONFERENCE ROOM )

### WEDNESDAY 24 OCTOBER

TH COSMO COFFEE

**11:00 Special Discussion Session. CERN ( 4-2-011 - TH common room )**

EVERYBODY (CERN-TH, U. GENEVA, EPFL)

ISOLDE SEMINAR

**14:30 Mass Spectrometry and Decay Spectroscopy around 132Sn. CERN ( 26-1-022 )**

DR. TOMMI ERONEN (UNIVERSITY OF JYVÄSKYLÄ, MPIK HEIDELBERG)



## Management & Communication training

### Management and communication courses – places available

There are places available in some management and communication courses starting before the end of the year. You can then sign-up on line. For advice, you can contact: Erwin Mosselmans, tel. 74125, erwin.mosselmans@cern.ch / Nathalie Dumeaux, tel. 78144, nathalie.dumeaux@cern.ch

#### Course

Conflict Resolution for Managers  
Communicating to Convince  
Orientation Service

#### Dates

12-13 November  
13-14 November  
27 and 29 November

#### Duration

2 days  
16 hours  
2 days

#### Language

English  
English  
French

#### Availability

6 places  
4 places  
2 places

### Learning and Development Policy available on HR web

The full text of CERN's "Learning and Development Policy" is now available in English and French on the HR training website: [cern.ch/hr-training/](http://cern.ch/hr-training/). This new policy was presented to all personnel in the HR Public meeting held on Monday 25 June, and the slides and the video recording remain available on Indico.

Pascale Goy, Head of the Learning and Development Group in HR, is available for more information: [pascale.goy@cern.ch](mailto:pascale.goy@cern.ch), tel. 62232.