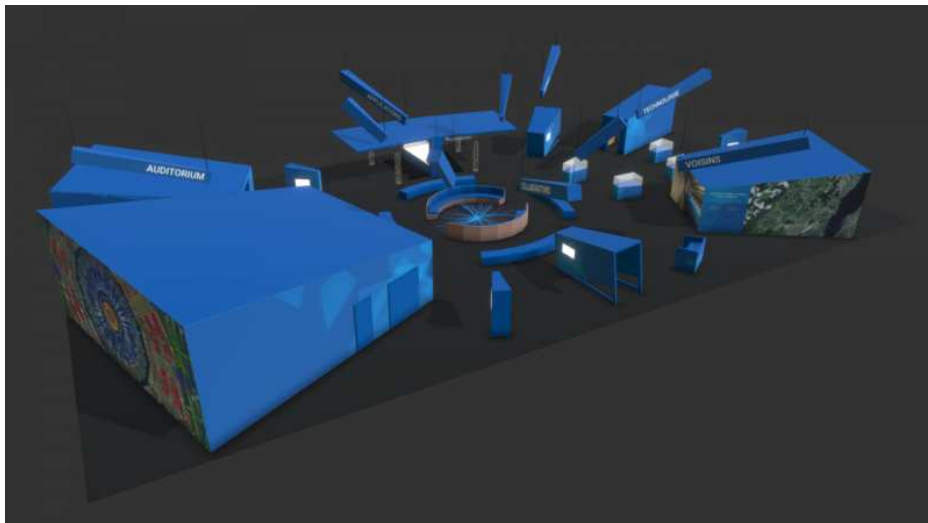


## CERN: THE STAR OF THE AUTOMNALES

Pass on CERN's passion for science at Geneva's Automnales fair, where the Laboratory will be the guest of honour.



View of the CERN stand at the Automnales. (Image: Daniel Dominguez/CERN)

Grab your friends and neighbours and take a wander around the Automnales. In between tasting longole sausage and watching a demonstration of amazing kitchen gadgets, introduce them to CERN. This year, CERN is the guest of honour at Geneva's huge local fair, which will take place at Palexpo from 10 to 19 November. It's an opportunity for us to present CERN to people who would never have thought of visiting the Laboratory otherwise.

The CERN stand, whose structure represents a particle collision, will consist of 1000 square metres of exhibits and activities. Your friends and family will have the

chance to find out all about the particle physics adventure and to meet researchers and other CERN personnel. All aspects of fundamental research and its applications will be presented using exhibits, activities, films, quizzes and even virtual reality headsets.

Everyone, regardless of their age or previous knowledge, will find activities to suit them. No fewer than 160 volunteers from CERN have offered to give their time to introduce the Laboratory to the 150 000 people expected to visit the fair.

*(Continued on page 2)*

### A WORD FROM CHARLOTTE LINDBERG WARAKAULLE

#### FEAST ON CERN SCIENCE AT THE AUTOMNALES

In this season of mist and mellow fruitfulness, CERN is set to display its full bounty at this year's Automnales: Geneva's annual fair of all things to do with the home. As guest of honour, CERN has a prime piece of Palexpo real estate in which to engage with the expected 150 000 visitors. It's an unprecedented opportunity for us to meet our neighbours and share our mission. CERN's pride of place at the Automnales concludes an incredibly rich year of outreach – more than doubling the participation in our annual Researchers' Night, a successful presentation of our contribution to the sustainable development goals at the UN Open Day, a celebration of World Teachers' Day, our very first Dark Matter Day and our second participation in the WOMAD music festival – to name just a few.

*(Continued on page 2)*

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# A WORD FROM CHARLOTTE LINDBERG WARAKAULLE

## FEAST ON CERN SCIENCE AT THE AUTOMNALES

Like all attractions, CERN suffers from the proximity effect: people come from around the world to see us, while our neighbours go to see the world. That's why we were thrilled to receive the invitation to be guest of honour at this year's Automnales.

The fair is an opportunity for us to engage with people who might have lost touch with their inner scientist. Covering 1000 m<sup>2</sup>, the CERN stand will give visitors a spectacular overview of what CERN is all about, with the Brout-Englert-Higgs mechanism being just the icing on the cake. Technology, applications, collaboration and spin-offs will all feature prominently. The stand will also provide us with a showcase to explain how CERN contributes to the region.

Among the stand's highlights will be the now-famous proton football game and the increasingly popular virtual re-

ality films of the CERN Data Centre and CMS. Demonstrations range from a multimedia-based proton therapy game to hands-on physics activities. An auditorium for interactive presentations and a cinema showing CERN-related films are also included. Souvenirs to take away include posters, a range of CERN-inspired temporary tattoos and some surprising sugar packets: if you ever wondered how much of the sugar you stir into your coffee is stardust, or how many calories there really are in a packet of sugar, come to Palexpo to find out.

The stand will be equipped with interactive screens allowing visitors to explore CERN at their own pace. There will be a clickable world map showing the full extent of CERN's collaborations, and a large-scale map of the region where everybody can situate their own home with respect to CERN. Having whetted

their appetites at Palexpo, members of the public will be able to sign up for a visit after the event.

All in all, it is set to be a veritable cornucopia of science, served up by those best placed to do so: you. Because front and centre will be our greatest asset: our people. It is the passion for science, the pride in our work and our mission that really touches our visitors and all of those who engage with us when we reach out locally and globally. Thanks to our over 150 volunteers for your commitment and for sharing your pride in CERN. The Automnales – and all our other outreach initiatives – would not be possible without you. And to those of you planning to visit, enjoy the autumnal feast!

*To know more about the Automnales follow this link.*

*Charlotte Lindberg Warakaulle  
Director for International Relations*

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## CERN: THE STAR OF THE AUTOMNALES

The theme of this year's Automnales is "Passionately!" That's very appropriate, since scientific research is a fascinating field driven by passionate people. Come and share that passion at our stand!

The Automnales will take place at Palexpo from 10 to 19 November and will be open from 11 a.m. to 9 p.m. Monday to Saturday and from 10 a.m. to 7 p.m. on Sundays. Admission will be free of charge after 7 p.m.

*A limited number of invitations will be available for pick-up from Thursday 8 November at the Reception in building 33.  
Maximum 5 per person, while stock lasts.*

**The CERN stand will be located in Hall 1 and will offer a wide range of activities.**

### Activities available throughout

- **Virtual reality tours** - Duration: about 5 minutes.  
*Virtual reality headsets will offer visitors the chance to see the LHC accelerator, a detector and the Data Centre up close.*
- **Proton football** - Duration: about 5 minutes.  
*How can we make a Higgs at the Automnales? By playing proton football! Take a shot and try to make the protons collide with as much energy as possible.*
- **HEAL: protons for health** - Duration: about 5 minutes.  
*A game designed to teach people about the role of accelerators in medicine.*

- **Info screens, posters, objects, etc.** - Duration: a few minutes for each item.  
*Multimedia screens, informative posters and various objects take visitors on a journey into CERN's world.*

### Shows

- **Quiz and "CERN in 15 minutes"** - Duration: 20 minutes. For ages 12 and up. In French.  
*After taking part in a quiz to test what you know (or think you know) about the Laboratory, learn about CERN in five steps. This is followed by a public question and answer session.*
- **Fun With Physics** - Duration: 45 minutes. For ages 7 and up. In French.

*The surprising properties of liquid nitrogen: smash a rubber tube using a hammer or make a train levitate - it's not magic, it's science!*

- **The electric show** - Hosted by the University of Geneva's Physiscopie - Duration: 45 minutes. For ages 10 and up. In French.

*What goes on inside the electrical circuits that power lamps or TVs? Is there any electricity in the air? Does the human body conduct electricity? Find out the answers to all these questions with the Electric Show!*

- **Virtual guided tours** - Duration: 45 minutes. For ages 12 and up. In French. See the control rooms of the ATLAS, CMS and LHCb detectors in real time, and take the opportunity to ask the researchers about their daily work.
- **Particle tracking** - Duration: 45 minutes. For ages 12 and up. In French. Find out how we can use a pixel detector, just like those used in the LHC experiments, along with a normal tablet to observe some of the particles surrounding us.

#### Activities for young audiences

- **Code science** - Duration: 45 minutes. For ages 7 and up (minors

*must be accompanied by an adult).* Places limited. Children will be taught how to programme a robotic arm or a touch screen, two technologies used every day at CERN.

- **Cloud chambers** - Duration: 45 minutes. For ages 12 and up (minors must be accompanied by an adult). Places limited.

*Participants will have the chance to build their own particle detector and then use it, just a few minutes later, to observe the particles that are all around us, some of which come from space.*

- **Physics at home** - Duration: 15 minutes. For ages 6 and up (minors must be accompanied by an adult). Places limited.

*Fun experiments using household objects will demonstrate the principles on which CERN's accelerators rely.*

**Film screenings** (The programme will be shown on-screen. Free of charge, no reservation required.)

- **Bienvenue au CERN** - Every 15 minutes. In French. A physicist presents all aspects of CERN.
- **Big science – Big data** - Duration: 15 minutes. For ages 10 and up. In French. A short film about CERN's

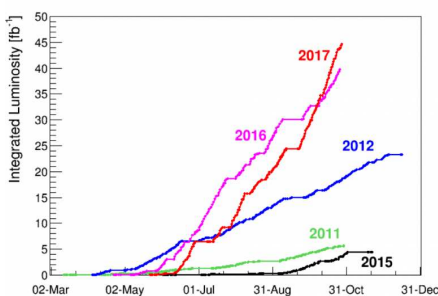
incredible computing infrastructure, which is capable of collecting and storing tens of millions of gigabytes of data every year.

- **Big science – Big Bang** - Duration: 15 minutes. For ages 10 and up. In French. A short film about the LHC, the biggest particle accelerator in the world.
- **Sur les routes de la science: le côté sombre de l'Univers** - Duration: 47 minutes. For ages 12 and up. In French. The "ordinary" matter that we know about makes up only 15% of the matter in the Universe. The rest, referred to as "dark matter", remains a mystery. Two journalists investigate.
- **Taming the quantum world** - Duration: 46 minutes. For ages 14 and up. In English with French subtitles.
- The relationship between computing and quantum physics.
- **BBC horizon: Inside CERN** - Duration: 59 minutes. For ages 12 and up. In English with French subtitles.
- The ups and downs of fundamental research, from the excitement of a possible discovery to the disappointment when the signals fade away.

Corinne Pralavorio

## LHC REPORT: LHC REACHES 2017 TARGETS

**Not only has the LHC reached its 2017 production target ahead of schedule, it has also doubled its design luminosity**



Multiannual overview of the integrated luminosity evolution. The 2017 line shows not only that the 45 fb<sup>-1</sup> target was reached and surpassed but also the fastest accumulation of all years.

On Monday, 30 October, the CERN Control Centre operators announced good news: the Large Hadron Collider (LHC) had successfully met its production target for 2017,

delivering more than 45 inverse femtobarns\* to the ATLAS and CMS experiments. This achievement was all the more impressive as it was ahead of schedule.

The LHC is continuing to provide physics data to the experiments. Yet, earlier this year, it seemed unlikely that this target would be achieved. An issue had developed in the interconnection between two magnets, collectively known as 16L2, which was affecting machine performance. Then, in early September, thanks to effective and creative collaboration between various teams at CERN, several ways to deal with the technical issue were developed, enabling the LHC and its injector chain to reach top performances again. In addition, by the end of September, the

2017 production run had been shortened by bringing special runs planned for 2018 forward to 2017, putting yet more pressure on the operators to deliver in a shorter time frame.

Nonetheless, with the target met, as well as another milestone achieved on Thursday, 2 November when stable beams were declared with a peak luminosity of  $2.05 \times 10^{34} \text{cm}^{-2}\text{s}^{-1}$ , more than twice the design luminosity, the LHC has once again shown its excellence.

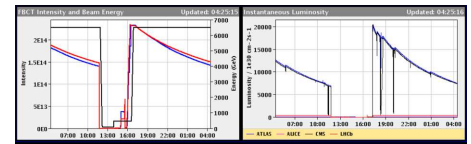
Lately the peak luminosity has been levelled down to  $1.5 \times 10^{34} \text{cm}^{-2}\text{s}^{-1}$  to avoid too much pile-up of events in the ATLAS and CMS detectors. However, on 2 November this was not done for two reasons: firstly to

have the ATLAS and CMS detectors working under a high pile-up regime and secondly to gain more insight into the actual cooling margins of the triplet magnets that are situated on either side of the ATLAS and CMS experiments and absorb much of the collision debris.

The 2017 physics run will end this year, with 15 days of special runs plus a machine development period before the winter shut-down begins on 4 December, one week earlier than initially scheduled. At that point, the year-end technical stop (YETS)

will be used to help consolidate and improve the machine and the experiments, ahead of the restart in spring 2018, ready to try and increase the integrated luminosity to  $90 \text{ fb}^{-1}$ , the goal set for 2017 and 2018.

\* The inverse femtobarn ( $\text{fb}^{-1}$ ) is the unit of measurement for integrated luminosity, indicating the cumulative number of potential collisions. One inverse femtobarn corresponds to around 100 million million collisions.



Part of LHC Page 1, where the left hand side shows that the peak luminosity reached  $2.05 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$  and for which no levelling was applied.

Rende Steerenberg and Kate Kahle

## COMPUTER SECURITY: AND IN THE REAL WORLD?

**In the real world, we have become accustomed to acting securely, but we struggle to keep our computers up to date such that basic digital protections**

Why do computers remain unpatched? Why are passwords lost even today? Why do people still open malicious attachments? Why is encryption not always embraced? Is the major problem with understanding cybersecurity that it is not tangible? You can't touch it. You can't smell it. You can't hear it. While computers and smartphones can be touched/smelled/heard, their apps and your data can't. That makes cybersecurity abstract and easy to ignore, forgotten as soon as the mind focuses elsewhere.

In the real world, we have become accustomed to acting securely. We lock our houses and shut the windows when going on holiday. If the lock or window is broken, we get it fixed. If some stranger asks us for our credit card PIN, we tell them to get lost. The same applies if a stranger offers us, for example, a small bag of white powder and asks us to carry it across the border: we (should) decline and leave. And, for sure, we do not shout out intimate details about recent family problems, illnesses, affairs and so on.

On the other hand, we usually also store lots of (digital) valuables in our computers:

bank information, private correspondence, family photos and videos. For some of us, our whole life is accessible through our computer (see our *Bulletin* article "Open door, open screen, open life..."), but we struggle to keep our computers up to date such that basic digital protections are in place. Some people reply if they receive an e-mail from a stranger, in an unusual context, possibly even in a foreign language, asking for their Apple ID, Office 365 account details or CERN password. Sure, they won't have given away their PIN. But such e-mails are like any other unverified communications in the open with strangers. Only the context transforms the stranger and the conversation into something tangible and trustworthy (or not). The same holds for web links: every blue, underlined text pointing to another webpage is nothing other than a potential 'small bag of white powder' offered to us by a stranger. Only the context makes it trustworthy (or malicious). Also, if you do not use encrypted channels (e.g. HTTPS, SSH or VPN), your digital communication with the world is public – whether you're browsing the web, posting on Facebook or accessing your inbox. All unencrypted communication is shouted out aloud to those who want to listen...

So, please think a bit more about the real world. Think about the protection of your valuables at home. Think of your PIN. Of small bags offered in dark places. About the way you talk about family business. Then do the same in the virtual world: keep your computer, laptop and smartphone up to date, protect your password, STOP — THINK — DON'T CLICK, and make sure that you use 'HTTPS' when browsing (check for the 'https://' in your browser's URL address bar — the 's' is important).

Do you want to learn more about computer security incidents and issues at CERN? Follow our Monthly Report ([http://cern.ch/security/reports/en/monthly\\_reports.shtml](http://cern.ch/security/reports/en/monthly_reports.shtml)). For further information, questions or help, visit our website (<http://cern.ch/Computer.Security>) or contact us at [Computer.Security@cern.ch](mailto:Computer.Security@cern.ch).

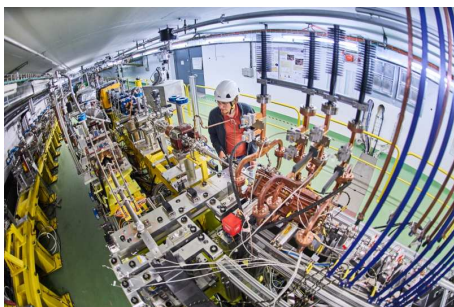
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The Computer Security Team



# CLEAR PROSPECTS FOR ACCELERATOR RESEARCH

**A new user facility, the CERN Linear Electron Accelerator for Research (CLEAR), hosts accelerator research and development projects**



*The CERN Linear Electron Accelerator for Research (CLEAR) will enhance and complement the existing accelerator R&D programme at CERN. (Image: Julien Ordan/CERN)*

A new user facility for accelerator R&D, the CERN Linear Electron Accelerator for Research (CLEAR), started operation in August and is ready to provide beam for experiments. CLEAR evolved from the former CLIC Test Facility 3 (CTF3) used by the Compact Linear Collider (CLIC), which ended its successful programme in December 2016. Following approval of the

CLEAR proposal, the necessary hardware modifications started in January and the facility is now able to host and test a broad range of ideas in the accelerator field.

CLEAR's primary goal is to enhance and complement the existing accelerator R&D programme at CERN, as well as offering a training infrastructure for future accelerator physicists and engineers. The focus is on general accelerator R&D and component studies for existing and possible future accelerator applications. This includes studies of high-gradient acceleration methods, such as CLIC Xband and plasma technologies, as well as prototyping and validation of accelerator components for the High-Luminosity LHC upgrade.

The scientific programme for 2017 includes: a combined test of critical CLIC technologies, continuing previous tests performed at CTF3; measurements of radiation effects on electronic components to

be installed on space missions in a Jovian environment and for dosimetry tests aimed at medical applications; beam instrumentation R&D; and the use of plasma for beam focusing. Further experiments, such as those exploring THz radiation for accelerator applications and direct impedance measurements of equipment to be installed in CERN accelerators, are also planned.

The experimental programme for 2018 and beyond is still open to new and challenging proposals. An international scientific committee is currently being formed to prioritise proposals, and a user request form is available at the CLEAR website: [cern.ch/clear](http://cern.ch/clear).

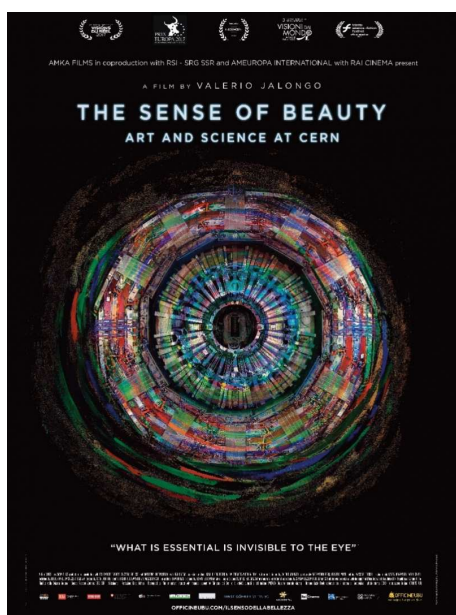
*This article first appeared in the November 2017 issue of the CERN Courier. You can read the original here: <http://cerncourier.com/cws/article/cern/70118>.*

*Matthew Chalmers*

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## THE SENSE OF BEAUTY: WHEN SCIENCE MEETS THE SEVENTH ART

**On 16 November at 18:00, a premiere screening of the film *The Sense of Beauty* will take place in the Main Auditorium**



On 16 November at 18:00, a premiere screening of the film *The Sense of Beauty* will take place in the Main Auditorium.

*The Sense of Beauty* is a film by Valerio Jalongo, produced at CERN with the participation of many of the theorists, experimentalists and technicians working in the laboratory.

An introduction by the CERN Director-General Fabiola Gianotti will precede the screening and a Q&A session will conclude the evening.

# Official communications

## CERN PENSION FUND – 2017 ANNUAL INFORMATION MEETING

On 19 October, Dr Thomas Roth (Chair of the CERN Pension Fund Governing Board) and Matthew Eyton-Jones (Chief Executive Officer of the CERN Pension Fund) hosted the Annual Information Meeting of the Pension Fund, where they provided an overview of the 2016 Annual Report and Financial Statements, talked about recent investment performance and answered questions from attendees.

Notably, the Fund won two awards in 2016:

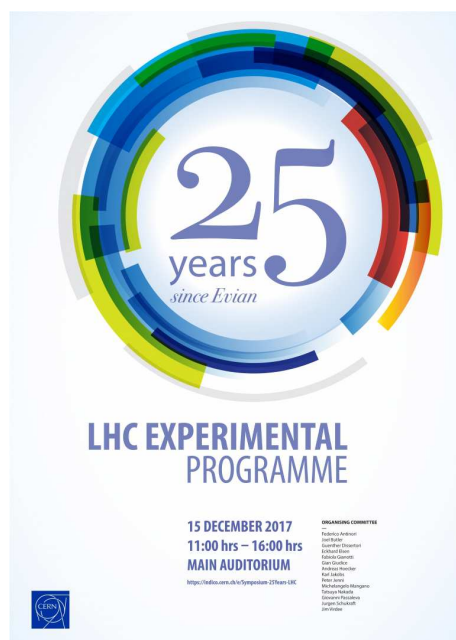
- Best Medium Real Estate Investor of 2016, awarded by Investment and Pensions Europe at its Real Estate Global Conference and Awards .
- Chief Investment Officer of the Year in 2016, awarded by the Institutional Investor Institute at its

Swiss, German and Austrian Summit .

A copy of the 2016 Pension Fund Annual Report and Financial Statements is available here ([http://pensionfund.cern.ch/wp-content/uploads/2017/08/pfcern\\_2016\\_annual\\_report\\_financial\\_statements.pdf](http://pensionfund.cern.ch/wp-content/uploads/2017/08/pfcern_2016_annual_report_financial_statements.pdf)).

## Announcements

## SYMPOSIUM TO MARK 25 YEARS OF THE LHC EXPERIMENTAL PROGRAMME



**Friday, 15 December 2017 from 11.00 a.m. to 4.00 p.m.**

**in the Main Auditorium (500-1-001)**

Twenty-five years have passed since the Evian meeting in March 1992, when the LHC experimental programme was launched. The Evian meeting was a crucial milestone in the design and development of the LHC experiments. Detector ideas discussed at Evian evolved into Letters of Intent that were submitted between 1992 and 1995, and which subsequently led to the construction of the LHC experiments.

The symposium will retrace the emergence of the LHC experimental programme against the backdrop of the physics landscape of the early 1990s. It will be an occasion to recall some of the ingenuity and a

few of the bold decisions that led to the superbly functioning LHC detectors of today.

The symposium will end with a jamboree reviewing recent experimental results from the LHC experiments.

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*This symposium is open to the entire CERN community; registration is not required.*

*In the event of the Main Auditorium being over capacity, you will be able to watch a live webcast of the symposium in the Council Chamber (503-1-001).*

*To see the full programme for the event, visit this Indico page (<https://indico.cern.ch/event/653848/timetable/?print=1&view=standard>).*

# GREEN MOBILITY EQUIPMENT AT CERN



One of CERN's new bike repair stations. (Image: CERN)

On the initiative of the CERN Mobility Services team (SMB department), six bike repair stations have been acquired and were installed across the Meyrin and Prévessin sites on Wednesday, 25 October.

On the Meyrin site, you can find the repair stations at entrances A, B and C. On the Prévessin site, they are located at the main entrance, the entrance on *Route du Maroc*, and the entrance on *Chemin du Moulin des Ponts*. The stations provide basic repair tools and a manual pump that can be used for daily maintenance of both personal and CERN bikes. Please help us to keep the repair stations in shape by using them with care! If you have any questions, contact the CERN Mobility Service.

The SMB department has also made an effort to install shower points at strategic locations. You can find the list of showers available for use here (<http://cern.ch/go/showers>) (or by searching "showers" in the CERN Service Portal).

The aim of these initiatives is to encourage the use of sustainable transport by supporting those who commute by bike in and around CERN.

*CERN Mobility Services*

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## DISCUSSION WITH CERN'S DIRECTORATE

Dear Colleagues,

I would like to invite you to an open discussion with CERN's Directorate on Wednesday 29 November at 16:00 in the Main Auditorium. This meeting will give all of you the opportunity to ask questions and make suggestions on topics of interest to everyone - from scientific issues to life at CERN, from relations with the outside world to the future of the Organization - all

ideas are welcome. After the session, we will also be asking for your feedback on the format of this event as a way to strengthen dialogue at CERN.

Details about the webcast will be posted here. Please save the date!

If you already know that you will not be able to join us on the day, and nevertheless have questions you wish to

ask, please send them to [directorате-questions@cern.ch](mailto:directorате-questions@cern.ch). Anna Cook, who will moderate the event, will try to include as many as possible.

Best regards,

*Fabiola Gianotti, on behalf of the entire Directorate: Frédérick Bordry, Eckhard Elsen, Martin Steinacher and Charlotte Warakaulle*

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## READY, STEADY, SORT!



In 2016, 50% of the 5700 tonnes of waste produced by CERN was recycled and recovered through various recycling organizations. That's not bad, but we could do much better. Did you know, for example, that three-quarters of the waste in your rubbish bin could be recycled... as long as you sort it correctly?

Find out more about sorting, recycling and recovery of waste in the Main Building from 20 - 24 November.

Find out more about recycling at CERN on the on the SMB department's website.

## 9 NOVEMBER: SHIP OPEN COLLOQUIUM

On Thursday 9 November afternoon, SHiP is organising an Open Colloquium on the Physics Landscape in 10 years with the following speakers:

1. Introduction (Andrei Golutvin)
2. Expectations for discoveries from LHC prior to the HL-LHC phase (Matthew McCullough)
3. Theory of Lepton Number and Lepton Flavour violation (Frank Deppisch)
4. Lepton flavour violation in muon decays (Adrian Signer)
5. Review of Dark Sector activities in North America (Maxim Pospelov)
6. Status of SHiP (Nicola Serra)

For the full agenda see here (<https://indico.cern.ch/event/663423/sessions/249982/#20171109>).

Everyone is welcome!

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## WIT DIVERSITY TALK WITH SIJBRAND DE JONG | 20 NOVEMBER



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## ALICE, ATLAS, CMS AND LHCb CAREER NETWORKING EVENT 2017

You are invited to register for this year's networking event enabling current postdocs and graduate students to meet alumni of the LHC experiments.

**Monday, 13 November 2017 from 5 p.m. to 11 p.m.**

**CERN, Main Auditorium (500/1-001)**

This event offers an insight into career opportunities outside of academia. Various former members of the LHC collaborations will give presentations, take part in a panel

discussion and elaborate on their experiences in companies working in a diverse range of fields (industry, finance, IT, etc.). There will be opportunities to ask questions during the panel discussion, the break and after the event.

The event is supported by the ALICE, ATLAS, CMS and LHCb collaborations and the CERN Alumni Programme.

Attendance is limited and priority will be given to members of ALICE, ATLAS, CMS and LHCb.

**Registration is obligatory and a fee of 10 CHF must be paid in advance.**

Note: A live webcast (which will not be recorded) will be available. This webcast will only be accessible to those with a valid CERN account.

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For more information, see Indico: <https://indico.cern.ch/event/661424/>.



# Ombud's corner

## SEXUAL HARASSMENT – LEARN TO RECOGNISE THE SIGNS AND TAKE ACTION!

The deluge of reactions and accounts of abuse since the Weinstein affair hit the headlines has led me to reflect on a sometimes hidden problem: sexual harassment.

*"I had been a fellow for six months and went to a conference with my colleague. He was an engineer of around the same age as my father, universally respected by his peers and with a solid reputation in his field. The evening we arrived at the hotel he invited me to dinner and made it obvious what he wanted, despite acting in quite a paternal way towards me."*

Of course, CERN is not Hollywood, with its colossal financial stakes and its omnipotent bosses. But there is no reason to believe that CERN is free of inappropriate or sexist behaviour, or even sexual harassment, just like all sectors of society. People who are guilty of this type of behaviour often have a relationship of power over you, for example your immediate supervisor or someone on whom you are depending to achieve your objectives. Even though men can sometimes be affected, more often than not the victims are women.

### How do I recognise the signs?

Of course, none of us should get completely paranoid, but if you notice certain behaviour that seems like it could degenerate into harassment, stay vigilant and you won't be caught off guard. The following examples might seem a bit exaggerated, but they are based on the testimonies of real-life victims of harassment:

- Sexist jokes often fill the air in the service where you work.
- Your boss or your colleagues openly comment on your clothing.
- Your supervisor frequently gives you little gifts for no reason or offers you unjustified benefits or privileges and you are the only person in the team who receives such treatment.
- Your supervisor regularly invites you for lunch without your other colleagues or suggests taking a day's leave together to show you around a nice part of Geneva.
- You regularly receive compliments, directed only at you, without any objective reason.
- Your supervisor starts to confide in you about personal matters and encourages you to confide in him or her.

### How should you react?

Try first of all to address the problem immediately and directly with the person who is bothering you. Do this objectively and calmly, but make sure that the message is clear.

*"Until now, I've been very happy with our working relationship. But I feel very uncomfortable when you come up behind me in my office and get close to me to look at what I'm doing over my shoulder. I would be grateful if you could stop doing that."*

If that doesn't get the desired result, say that you are going to talk to his or her

supervisor. When you do so, request a deadline for a response: your hierarchy is obliged to protect your integrity and to take action.

Make careful notes of all the events and actions that bother you. This will give you an opportunity to take a step back from the situation, but will also be very useful for supporting your version of events if you have to pursue the case further.

Talk about the situation with people you trust. You might discover that you are not the only one it's happening to and it is much easier to take action if several people are involved.

If none of this produces the desired result, unfortunately your only option will be to take more formal steps.

I recommend Véronique Ducret's book on this subject, *Qui a peur du harcèlement sexuel ?* published by Georg Editeur, which will soon be available in the CERN Library.

You can also find a previous article on sexual harassment.

If you find the subject interesting, let me know and I will publish more advice on my blog.

*Pierre Gildemyn*