# CERN Bulletin

Issue No. 28-29/2019-Wednesday 10 July 2019
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## FCC WEEK BRINGS A FRESH BREEZE OF IDEAS FROM BRUSSELS

**International researchers and industry meet in Brussels for the annual meeting of the Future Circular Collider (FCC) study to discuss the post-LHC era**


*CERN's Director-General, Fabiola Gianotti, welcomes participants to the FCC Week 2019 in Brussels, Belgium. The event also marks the final event of the EU-funded Horizon 2020 EuroCirCol project. (Image: Nicolas Lobet/CERN)*

From 24 to 28 June, more than 400 researchers from around the world convened at the annual meeting of the Future Circular Collider (FCC) study. Academic and research institutes, industrial partners and funding agencies discussed innovations in the fields of superconductivity, high-field magnets, superconducting RF systems and civil engineering studies and sought to clarify issues surrounding the experimental research topics that FCC can address.

This year's meeting marked the final event of the Horizon 2020 EuroCirCol project. Thanks to the European Union's support, a wealth of results in high-tech domains were achieved through the collaborative efforts of partners from Europe and from non-European countries such as the USA, Japan, Korea and Russia. Researchers demonstrated impressive progress toward 16-Tesla magnets and in the performance of superconducting wires.

*(Continued on page 2)*

## In this issue




**Published by:**
CERN-1211 Geneva 23, Switzerland writing-team@cern.ch
**Printed by:** CERN Printshop

©2019 CERN-ISSN: **Printed version:** 2011-950X
**Electronic Version:** 2077-9518

# FCC WEEK BRINGS A FRESH BREEZE OF IDEAS FROM BRUSSELS

In the context of the US DOE magnet-development programme, breakthroughs in both fields, such as a first accelerator-type magnet exceeding 14 T and a 50% increase in the critical current density of $Nb_3Sn$ wire, promise to reduce significantly the costs of exploring the high-energy frontier and could find practical applications outside particle physics.

The four-volume FCC Conceptual Design Report (CDR) was presented, documenting progress since the 2013 kick-off meeting and authored by 1350 people from 150 institutes. “This report is a remarkable achievement by an effective and diverse collaboration” states Frédérick Bordry, CERN's Director for Accelerators and Technologies. “It underlines the global attractiveness of the FCC and documents the far-reaching benefits that the project can have for Europe and future generations”.

A wide range of talks focused on a future circular lepton collider (FCC-ee) as the first step of the FCC programme, followed by an energy-frontier proton collider (FCC-hh). Results testify to the technological readiness of the FCC-ee which, combined with progress in the design of beam optics and interaction regions, confirm the feasibility of this machine that could be operational by the end of the 2030s.This schedule would also give time to push the limits of the novel technologies required for an energy-frontier 100 TeV collider.

Precision studies of the Higgs boson, along with a number of other electroweak observables set a clear experimental challenge for the FCC. In his keynote talk, Nima Arkani-Hamed from Princeton's Institute of Advanced Studies highlighted the importance of scrutinising the Higgs boson for the experimental programme of a post-LHC machine. Speakers also stressed the complementarity between the different collider options in searching for dark-matter candidate particles and new physics. Finally, the potential for studying the strong interaction through heavy-ion collisions and detailing the parton distribution with a proton-electron interaction point were demonstrated.

The sustainability of research infrastructures and the assessment of their societal impact were the two key themes of the “Economics of Science” workshop held during the FCC week. Experts from the field of economics shared lessons learned with representatives from CERN and other research organisations, including SKA, ESA and ESS.

The diverse mix of participants at the FCC week, the positive reception from international researchers and industry and the increasing networking opportunities for young researchers provide a solid foundation and an ideal starting point for further successful joint activities in the coming years.

*The four volumes of the FCC Conceptual Design Report (CDR) recently published in the European Physical Journal were handed by Christian Caron from Springer-Nature (left) to (left to right) Michael Benedikt, FCC study leader; Fabiola Gianotti, CERN's Director-General and Frederick Bordry, Director for Accelerators and Technology. (Image credit: Nicolas Lobet/CERN) (Image: CERN)*

*Panagiotis Charitos*

# COMPUTING BOOST FOR LEBANON AND NEPAL

**Post-conflict nations establish supercomputing centres with CERN servers in a bid to stem brain-drain of highly-skilled graduates**

*Racking up: The HPC Nepal team in the new computing centre. (Image: D. Bista).*

In the heart of Beirut, in a five-storey house owned by the Lebanese national telecommunications company, floors are about to be coated to make them anti-static, walls and ceilings will be insulated, and cabling systems installed so wires don't become entangled. These and other adjustments will be completed by mid-2020, when approximately 3000 processor cores, donated by CERN, will arrive.

The High-Performance Computing for Lebanon (HPC4L) project is part of efforts by Lebanese scientists to boost the nation's research capabilities. Like many other countries that have been torn by conflict and have seen their highly-skilled graduates leave to seek better opportunities elsewhere, Lebanon is trying to stem its brain drain. Though the new facility will not be the only HPC centre in the country, it is different because it involves both public and private institutions and has the full support of the government. “There are a few small- scale HPC facilities in various universities, but they suffer from being isolated and are therefore quickly outdated and under-used,” says physicist Haitham Zaraket of Lebanese University in Beirut. “This HPC project puts together the main players in the realm of HPC in Lebanon.”

Having joined the CMS experiment at the LHC in 2016, Lebanese physicists want to develop the new facility into a CMS Tier-2 computing centre. High-speed internet will connect it to universities around the world and HPC4L will ensure operation, maintenance, and user-interfacing for smooth and effective running of the facility. “We've been working with the government and with private and public partners to prepare not just the infrastructure but also the team,” explains HPC4L project coordinator Martin Gastal of CERN. “CERN/CMS's expertise and knowledge will help set up the facility and train users, but the team in Lebanon will run it themselves.” The Lebanese facility will also be used for computational biology, oil and gas discovery, financial forecasting, genome analysis and the social sciences.

Nepal is another country striving for greater digital storage and computing power. In 2017 Nepal signed a cooperation agreement with CERN. The following year, thanks to around 2500 cores provided by CERN an HPC facility was established at the government-run IT Park, with experts from Kathmandu University forming the core team. Rajendra Adhikari, project leader of Nepal's HPC centre (pictured, second from right), also won an award from NVIDIA for the latest graphics card worth USD 3000 and added it to the system. Nepal has never had computing on such a scale before, says Adhikari. “With this facility, we will be able to train our students and conduct research that calls for high-performance computing and data storage, from climate modelling and earthquake simulations to medical imaging and basic research.”

The Nepal facility is planning to store health data from hospitals, which is often deleted because of lack of storage space, and tests are being carried out to process drone images taken to map topography for hydropower feasibility studies. Even in the initial phases of the new centre, says Adhikari, computing tasks that used to take 45 days can now be processed in just 12 hours.

The SESAME light source in Jordan, which itself received 576 cores from CERN in 2017, is also using its experience to assist neighboring regions in setting up and maintaining HPC facilities. “High-performance computing is a strong enabler of research capacity-building in regions challenged by limited financial resources and talent exodus,” says Gastal. “By supporting the set-up of efficient data processing and storage facilities, CERN and affiliated institutes can assist fellow researchers in investing in the scientific potential of their own countries.”

*This article was originally published in the CERN Courier.*

*Abha Eli Phoboo*

# TWICE AS COLD IN THE MAGNET TESTING HALL

**Improvements to the cryogenics infrastructure will more than double the liquid helium production capacity of SM18**

*The new cold box in the superconducting magnet test hall will more than double the liquid helium production capacity (Image: Antonio Perin/CERN)*

A new cold box has just been installed in the SM18 superconducting magnet test hall, but it's not just a simple box as its name might suggest. CERN's cold boxes are enormous machines, a bit like giant refrigerators.

This particular cold box is an essential component of the improvements being made to the infrastructure used to test the superconducting magnets and superconducting radiofrequency cavities. In preparation for the High-Luminosity LHC (HL-LHC) project, a major renovation and upgrade campaign has been under way for two years right across the SM18 area.

The High-Luminosity LHC will use new superconducting magnets and crab cavities. The development of these new components requires many tests to be carried out in parallel. “This renovation work will significantly improve our testing capacity,” explains Antonio Perin, who is in charge of the cryogenics upgrade project at SM18.

The main upgrade consists of the installation of a new helium liquefier made up of two components: a two-storey compressor weighing almost 40 tonnes and a cold box weighing almost 30 tonnes. This new assembly will considerably increase the helium production capacity in the hall. “These machines will allow us to more than double the production of liquid helium. The liquefaction capacity will increase from 25 to 60 grams of liquid helium per second,” says Antonio Perin.

The cooling of the helium and its transformation into a liquid takes place in two stages. First, the gaseous helium is compressed. The heat produced by the compression is evacuated via water circuits to cooling towers, which have themselves undergone major renovation. The compressed helium is then directed to a cold box. This system consists of turbines and heat exchangers that, after expansion of the helium, deliver it at 1.6 bar and 4.5 kelvins (-268 °C).

The new cold box will be able to produce 35 grams of liquid helium per second, which equates to 1100 litres per hour! To generate this torrent of liquid helium, almost 350 g of gaseous helium must be compressed to 18 bar every second, which requires around 1.5 MW of power.

Over the summer, the team and the supplier of the system will connect up multiple pipes and install all the electrical cables. The initial commissioning of the system is scheduled for September, allowing performance tests to take place during the autumn. The system will be connected to the infrastructure of SM18 and brought into service at the end of 2019 or early 2020.

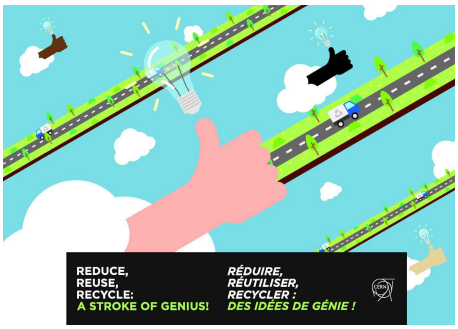
"This new cryogenic installation will allow us to take the performance of our facility to the next level. SM18 houses remarkable and unique infrastructure, which is what makes the test programme for the High-Luminosity LHC possible," concludes Antonio Perin.

*Delivery of the impressive new helium compressor for the SM18 test hall (Image: Antonio Perin/CERN)*

*Camille Monnin*

# SOLUTIONS TO IMPROVE WASTE RECYCLING

### Answers to the quiz and survey on waste management at CERN




*(Image: CERN)*

Recycling champions are all around us, as is evident from the quiz and survey answers submitted during the recent recycling campaign.

- Some 300 of you participated in the quiz and 56 of you answered all five questions correctly. The winners were picked at random and have been contacted.

Here are the answers, along with links to sites where you can find more information:

**Question 1** – What categories of waste are recycled or repurposed at CERN? At CERN, we recycle or repurpose metals, wood, PET, Nespresso coffee capsules and many other kinds of waste. (For further information: https://smb-dep.web.cern.ch/en/Introduction-Waste)

**Question 2** – Where should used office furniture be sent for re-use or recycling? The Recuperation and Sales service in Building 133 (on the Meyrin site) recycles office furniture that is in a poor condition and recovers furniture that is in a good condition for re-use. (For further information: https://smb-dep.web.cern.ch/en/Waste/What_goes_-where#Bulky_waste)

**Question 3** – To what percentage of their maximum capacity should the bins be filled before they are emptied? For safety reasons, bins should never be filled to more than 75% of their capacity before being emptied, whatever their size. (For further information: https://smb-dep.web.cern.ch/en/Waste/Skips_-Containers_Bins)

**Question 4** – Are lead batteries sorted in the same way as other batteries? Lead batteries are sorted in Building 133 and other batteries in Building 262. (For further information: https://smb-dep.web.cern.ch/en/Waste/What_goes_-where#Batteries)

**Question 5** – How are PET plastic bottles recycled? PET bottles are recycled to make new ones. Recycling PET bottles is 74% more environmentally friendly than incineration. (For further information: https://smb-dep.web.cern.ch/en/Waste/What_goes_-where#PET)

- The survey was completed by 247 people. Few of them (33%) knew about the SMB department's website dedicated to waste management, where you can find all kinds of information relating to waste sorting at CERN and the experts to contact if you have any questions. Some 78% of the respondents indicated that the campaign had taught them new information about waste management at CERN. The information that was deemed the most useful was that relating to recycled waste (for 34% of the respondents) and battery sorting (for 28% of the respondents). Around 55% of the respondents indicated that they would be interested in the creation of a "zero waste" club. A meeting will be held this autumn to launch the club under the auspices of the Staff Association.

The waste.management@cern.ch campaign team would like to thank all those who participated in the survey. They received numerous suggestions that will greatly help them to improve waste management at CERN. All the proposals will be taken into consideration in order to offer you new solutions in the near future.

# CELEBRATING DIVERSITY IN SCIENCE

**Leaders of international scientific organisations support the International Day of LGBTQ+ people in Science, Technology, Engineering and Maths**


*This 5 July marks the second International Day of LGBTQ+ people in Science, Technology, Engineering and Maths (STEM) (Image: Claire Lee/CERN)*

On the International Day of LGBTQ+ People in Science, Technology, Engineering and Maths (STEM) on 5 July, the Directors-General and leaders of CERN, EMBL, ESA, ESO, ESRF, European XFEL, EUROfusion and ILL – the eight scientific research and technology organisations of EIROforum – pay a special tribute to the indispensable contributions of LGBTQ+ colleagues in the STEM fields.

"Our scientific and technological accomplishments and the collective strength in our organisations, emanate from an environment that strongly values and supports a diverse workforce, where discrimination and prejudice are not tolerated," says Fabiola Gianotti, CERN Director-General and chair of EIROforum. "On the LGBT STEM day, the EIROforum organisations reaffirm their commitment to enabling current and future generations of researchers to contribute to science with their full potential by ensuring equality of treatment and opportunity for all."

Today, 5 July, marks the second International Day of LGBTQ+ People in STEM. Join the conversation on social media via the hashtags #LGBTSTEMDay or #LGBTQSTEMDay.

# EU COMMISSIONER CARLOS MOEDAS VISITS CERN

**A ceremony marked the tenth anniversary of the cooperation agreement between CERN and the European Commission**

*Carlos Moedas, European Commissioner for Research, Science and Innovation (right), with Frédérick Bordry, CERN Director for Accelerators and Technology, in the ATLAS experiment cavern (Image: CERN)*

Carlos Moedas, the EU Commissioner for Research, Science and Innovation visited CERN on 1 July. The programme included underground visits in the LHC and the ATLAS experiment, and a dedicated session to commemorate the tenth anniversary of the signature of the Memorandum of Understanding (MoU) for cooperation between both parties.

Under the MoU, CERN and the European Commission (EC) cooperate in a number of diverse areas for the benefit of the European Research Area, such as Research and e-infrastructures, International Cooperation, Open Access and Careers and Mobility of Researchers.

Highlights of this cooperation include strong support by CERN and the EC to SESAME, the Synchrotron Light source in the Middle East, as well as the contribution of CERN to European e-infrastructures, notably the Grid and the European Open Science Cloud. Other highlights include different activities to support the development and innovation potential of research infrastructures in the detector and accelerator domains, as well as the training of numerous young scientists and engineers in various fields of science and technology.

# A SUMMER OF FESTIVALS FOR CERN

**This summer CERN scientists will be showcasing particle physics at festivals across Europe**


*The Physics Pavilion at the 2016 WOMAD festival received over 3600 visitors (Image: CERN)*

For many, summer means attending an outdoor festival. Music festivals in particular have expanded all over the world and look to offer new experiences to curious festival goers. This has created opportu-

nities to share CERN's work, and science in general, with new audiences, many of whom admit to never normally attending science events.

Based on the success of CERN's participation in WOMAD, this summer sees three additional festivals on the schedule for the first time.

On Sunday, 30 June, a new Science Pavilion will open at Denmark's Roskilde Festival. Over three days, the CERN partnership with the Niels Bohr Institute will be offering talks, workshops and a 'lounge', along with a new interactive light installation measuring six metres in diameter and designed to resemble the LHC, nicknamed the 'Accelerator in the Sky'. Not forgetting the 'PhysMobile', a mobile laboratory run by Niels Bohr Institute scientists that will be pulled all over the huge campsite for impromptu physics demos.

Over at Slovakia's Pohoda Festival, on Friday, 12 July, the collaboration between CERN and Comenius University will inaugurate the Magical Science Tent. Each day this beautiful wooden infrastructure will host physics talks and workshops, including a DJ set from the ATLAS experiment's Larry Lee using the 'Colliderscope'. Visitors can take photos in front of an LHC tunnel backdrop and experience CERN through virtual-reality glasses.

The following week sees another partnership, just across the border in the Czech Republic where a group of Czech universities and CERN will be unveiling the new Big Bang Stage in the old ironworks at the Czech Colours of Ostrava festival. Four days of shows, workshops and even a live-link Q&A to NASA's Jet Propulsion Laboratory make up the programme.

Last but definitely not least is WOMAD in the UK. Such has been the success of this partnership with Lancaster University and the Institute of Physics, since the first Physics Pavilion in 2016, that there is now officially a 'World of Physics' at WOMAD (which has stands for World of Music Art and Dance... and now Physics). With three tents, the Accelerator in the Sky installation and this year even a planetarium, the organisers are looking to beat the record of more than 5500 attendees.

*Find out more over the summer via the social-media hashtags #sciencepavilion #magicalscience #bigbangstage #physicspavilion*

*Connie Potter*

# COMPUTER SECURITY: WELCOME SUMMER STUDENTS!

**In order to make your digital life as comfortable as possible, here are few useful things to know**

A warm welcome to the summer student class of 2019! On the agenda: challenging lectures in CERN's main auditorium. Visits to CERN's experiments and accelerators. Social events at the Residence Schuman (bike safely around the Saint-Genis roundabout!). Interesting projects to tackle with the team you work with. Time to take a great big gulp of CERN's academic freedom, spirit and creativity! In order to make your digital life as comfortable as possible, however, here are few useful things to know:

When you join CERN you are given a CERN computing account. Take care of its password as any evil-doer might misuse it to spam the world on your behalf, crypto-mine in your name on CERN's computing clusters, download journals in bulk from CERN's digital library, or simply compromise your CERN PC and extract your photos, documents or personal data – or just spy on you using your computer's mic or webcam. . . Similarly, take good care of your CERN and personal computers, tablets and smartphones. Give them some freedom to update themselves so you benefit from the latest protective measures. “Auto-update” is a good friend, just make sure that it is enabled – as it should be by default.

A particular nasty way to lose your password, at CERN or at home, is to answer so-called “phishing e-mails”, i.e. e-mails asking for your password. No serious person – the CERN Computer Security Team, the CERN Service Desk, your CERN supervisor – would send such an e-mail, only dishonest people or fraudsters. So stay on the look out and do not enter your password into weird webpages. Do not click on links in e-mails obviously not intended for you, for example, e-mails not addressed to you; not written in one of your native languages; or of no relevance to you. Ask us at Computer.Security@cern.ch if you have any doubts. Similarly, do not randomly click on web links, but stop and think first. Otherwise you might infect your computer in no time – and the sole remedy will be a full reinstallation of your device (easier if you have backups!).

CERN has awesome network connectivity to the world. But it is for professional purposes. While private usage is tolerated, please do not abuse this. Keep your bandwidth low. In particular, refrain from bulk downloading movies or software. Remember “copyright”? It also applies at CERN. Any violation of copyright reported to CERN will be followed up and any infringement costs will be passed on to the perpetrator. The same holds for pirated software. If you have stored pirated licence keys on your device, it's time to delete them. Companies are monitoring for abuse of their software and infringement costs can quickly reach five to six figures. If you need particular software, have a look at CERN's central software repositories.

Finally, you might be working on a project requiring digital resources. Setting up a webpage. Writing some code. Developing hardware. Please do not reinvent the wheel if you need a database. Or a webserver. Or some software. The CERN IT department can provide a wide variety of centrally managed and secure services for your digital convenience. Just put yourself on their shoulders and build on top. Free your time and brain up for creativity and let CERN IT provide the tools. Moreover, make sure that all your development work, software, design drawings, documentation, etc. are made available to your supervisor for the time after you have left. This will ensure your heritage and your legacy at CERN. If you keep them to yourself, they will get purged and deleted – and your time at CERN will be forgotten.

*Do you want to learn more about computer security incidents and issues at CERN? Follow our Monthly Report. For further information, questions or help, check our website or contact us at Computer.Security@cern.ch.*

*The Computer Security Team*

# Official communications

## SCHENGEN AREA* CONDITIONS FOR EXEMPTION FROM C VISA REQUIREMENTS IN FRANCE AND SWITZERLAND

**In order to enter and live in the Schengen Area, all nationals of countries other than the Member States of the European Economic Area** and Switzerland must be in possession of a valid residence permit issued by a Schengen state or a valid Schengen visa**

In order to enter and live in the Schengen Area, all nationals of countries other than the Member States of the European Economic Area** and Switzerland must be in possession of a valid residence permit issued by a Schengen state or a valid Schengen visa.

For short stays (limited to 90 days in a 180-day period) in the Schengen Area, exemptions from the obligation to obtain a C visa are possible.

In the case of residence in France, members of the personnel of certain nationalities may be exempt from the requirement for a short-stay visa, provided that, for example, they have been issued with a Hosting Agreement.

However, the Swiss authorities have reminded the Organization that all members of the personnel who are not a national of a Member State of the European Economic Area or Switzerland who reside in Switzerland while employed by CERN are subject to the requirement for a C visa if their stay in Switzerland exceeds eight days per calendar year (a very small number of nationalities are not subject to this rule).

Before coming to CERN, members of the personnel who are not nationals of a Member State of the European Economic Area or Switzerland must therefore check the conditions that are applicable to them according to their personal situation, by contacting the consulate in their home country or, for Switzerland, on the website: https://www.sem.admin.ch/sem/en/home/publiservice/weisungen-kreisschreiben/visa/liste1_staatsangehoerigkeit.html and, for France, on the website: https://france-visas.gouv.fr/.

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** http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/schengen/index_en.htm*

*** https://www.service-public.fr/particuliers/glossaire/R42218/ ; https://www.eesc.europa.eu/en/tags/european-economic-area*

*See also:*
*Schengen area - Entry, stay and exit - Documents required - Reminder: https://home.cern/news/official-news/cern/schengen-area-entry-stay-and-exit-documents-required-reminder*

*Relations with the Host States service*
*relations.secretariat@cern.ch*
*www.cern.ch/relations*

# Announcements

## CERN'S HARDRONIC MUSIC FESTIVAL – SAVE THE DATE

**Come and listen to good music at CERN's Hardronic festival on Saturday 20 July**

*The 2017 edition of the Hardronic festival (Image: CERN)*

The Hardronic musical festival is the opportunity for CERN's staff, summer students, users, and their friends and families, to come to the site and enjoy live music, animations, food and cool drinks.

This year's edition takes place on Saturday 20 July and has a top-quality programme that caters for many musical tastes. What's more, the bar is completely run for charity, supporting small but vital projects in Laos, Vietnam, and in Kolkata, India.

There will be food trucks providing some mouth-watering meals, activities for children and, for the first time in the festival's thirty-year history, the ATLAS collaboration will have a stand offering a chance to the festival-goers to explore the ATLAS experiment in virtual reality.

Don't miss this fantastic event, where science and music collide.

**When: Saturday 20 July, from 3.00 pm**
**Where: terrace of restaurant 3 on the Prévessin site**

For more information, check the festival's website: http://cern.ch/Hardronic/.

## GENEVA 2050 CONSULTATION: HAVE YOUR SAY

**The State of Geneva is launching a public consultation to gather opinions on the future of the canton**


*(Image: République et Canton de Genève)*

The Geneva State Council has launched an online consultation to gather the public's opinions on the major issues of the future. This survey is being organised in the framework of the Geneva 2050 project, which is looking to the future in order to anticipate and adapt public policy.

The survey is a great opportunity to express your opinions, hopes and expectations about the future of Geneva!

The survey will take you around 15 minutes to complete. It will be available in English and French via this link (*https://survey.satiscan.com/ge2050*) until 21 July.

## BLOOD DONATION - 16 AND 17 JULY FROM 8.30AM TO 3.30PM


*(Image: CERN)*

# CERN SUMMER STUDENT WEBFEST: WEEKEND OF SCIENCE & CREATIVITY

**Are you passionate about science? Then come along to the 2019 CERN Summer Student Webfest on the weekend of 26 to 28 July**


*(Image: CERN)*

Are you passionate about science? Do you like communicating that passion to the general public? Then come along to the 2019 CERN Summer Student Webfest on the weekend of 26 to 28 July.

The event is a grassroots initiative, open to all summer students, staff and users. It aims to spark new ideas and innovation for the future of web-based education about CERN, the LHC and particle physics, as well as in humanitarian aid, development and health.

The CERN Summer Student Webfest is a weekend of online web-based creativity, modelled on the gatherings (sometimes called hackfests or hackathons) that energise many open-source communities.

Participants in the CERN Summer Student Webfest will work in teams to design applications that encourage the public to learn more about science and, in particular, CERN's work. Projects can range from designing online games for kids to creating citizen-science projects and developing low-cost mobile-phone-based cosmic ray detectors. Examples of past projects can be found on the Webfest website. Prizes will be awarded to the best projects.

Although primarily targeted at CERN and CERN openlab summer students, the event is open to people of all ages at CERN with a passion for web-based science outreach and education. You do not have to be a software or hardware expert to contribute: many types of skill sets are needed, from writing and designing to physics and engineering.

**Kick-off**
Project ideas will be presented at a kick-off event on Friday, 26 July, from 4.00 p.m. to 6.00 p.m. Participants will organise themselves into teams to work on the most exciting pitches. The kick-off event will also introduce a range of tools for web development, creating online educational tools and contributing to science online.

**Submitting your ideas**
Anyone participating can pitch a project; pitches consist of short (less-than-five-minute) presentations. Participants are encouraged to submit their project ideas on the Webfest website in advance, for the best chance of forming a well-defined team.

**Where will the participants work?**
Teams will work primarily in CERN Restaurant 1. As the location is an open-space environment, there will be plenty of opportunity for interaction. CERN openlab will provide meal tickets for participants.

**Presentations and winners**
The event will wrap up on Sunday, 28 July at 4.00 p.m., with a judging panel reviewing the results (based on five-minute 'lightning talk' presentations by the teams) and awarding prizes.

The event is organised by CERN openlab. Our event partners also include Citizen Cyberscience Centre, crowdAI, Citizen Cyberlab project, the Port, CERN MediaLab, and the Quantum Future initiative.

# INTEL ADVANCED-COMPUTING USER GROUP

In September, CERN will host the annual conference of the ' Intel Extreme Performance User Group '. This community event — an important discussion forum for those making use of Intel's computing technologies to support their research — will take place in the CERN Globe of Science and Innovation on 24 and 25 September. Additional hands-on training sessions will also be held in breakout rooms on 26 and 27 September.

IXPUG is an independent user group. Its mission is to provide an environment for the free exchange of information, with the goal of enhancing the usability and efficiency of scientific and technical applications running on advanced computing systems that make use of Intel architecture.

The 2019 IXPUG annual conference will address a wide array of topics related to the adoption and deployment of state-of-the-art data-processing technologies and techniques, with a view to achieving optimal application execution. The event is an open forum, through which industry experts will share best practice and techniques for maximising software efficiency. Come along and share your experience working with these technologies, and learn from others in the field.

CERN and Intel have been collaborating closely for almost two decades through CERN openlab, a unique public-private partnership that works to accelerate the development of computing technologies for use by the research community. CERN openlab is responsible for organising the event at CERN.

Find out more about the event on the IXPUG website.

**Submission of abstracts for technical sessions, lightning talks, and hands-on tutorials is open until 19 July.**

# HAPPY HOUR – RESTAURANT 1


*(Image: CERN)*

# Ombud's corner

## IT'S OK TO LOG OFF DURING THE HOLIDAYS!

As this hot and sunny summer gets under way, I'd like to wish you all a well-deserved holiday!

I know many of us are even busier than usual during the long shutdown, scrambling to finish all our tasks to keep the work on schedule. On top of that, we have to deal with numerous organisational constraints and competing priorities, not to mention extra safety precautions. And lots of problems still need to be solved.

"So," you ask, "with all that going on, how can I go on holiday with a clear conscience?"

Keep in mind that when you "respect" your holidays, you do yourself, your team and the Organization a favour. Holidays aren't a luxury: they allow you to recharge your batteries and take a step back, and they're crucial to maintaining your stamina. When you get back, you'll see things through fresh eyes and have new ideas.

"That's all well and good, but my team still needs to be able to contact me in an emergency or if something goes wrong."

Are you sure they really can't do without you while you're on holiday? With decent organisation – projects and activities properly documented and clear notes pointing your colleagues and supervisor to all the information they need – and a bit of foresight as to potential problems and their solutions, you can go away without worrying about the consequences. And your colleagues will have the chance to prove they can take up the baton in your absence.

So, ready to go? It's time to think about yourself and your friends and family, who enjoy having you around – physically, but especially mentally. Be brave: switch off your computer and mobile phone and deactivate alerts and anything else that connects you to work. If you happen to see a

work e-mail pop up, think twice before replying.

And if, by the end of your holiday, you haven't managed to disconnect as thoroughly as you'd have liked, think about what you could do differently next time you go away.

The more successfully you distance yourself from work during the holidays, the more relaxed, refreshed and receptive you'll be when you get back, full of energy and new ideas!

*Pierre Gildemyn*

*If you'd like to comment on any of my articles or suggest a topic that I could write about, please don't hesitate to e-mail me at Ombuds@cern.ch .*