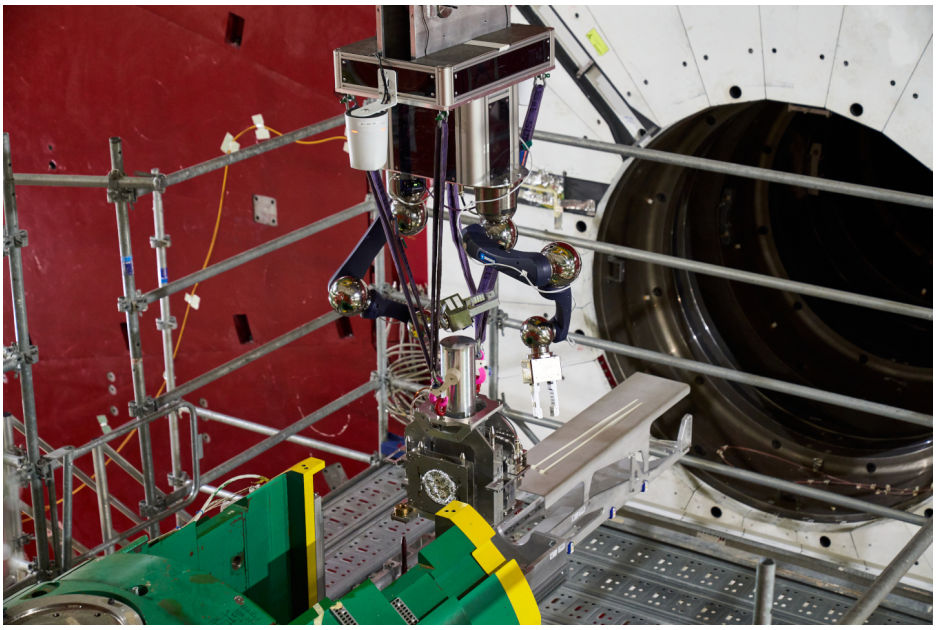
CERN Bulletin

Issue No. 8-9/2021-Wednesday 24 February 2021
More articles at *http://home.cern/cern-people*

HL-LHC RADIATION PROTECTION ROBOT PASSES FIRST IN-CAVERN TEST WITH FLYING COLOURS

The CERN CRANEbot successfully handled a vacuum module in the CMS cavern without the need for human intervention in a decisive test for the HL-LHC project



(Image: CERN)

The CERN CRANEbot is seen here carrying a VAX module (centre of the image) inside the CMS cavern, as part of an operation test conducted in early February 2021. The robot, which has been developed at CERN, had previously been tested in dedicated areas for the specific task before the final test in the cavern for a planned start of operation during Long Shutdown 3.

The versatile and handy CRANEbot has been designed to install and carry out routine maintenance work on a variety of equipment in areas that higher radiation levels caused by the planned tenfold increase in luminosity for HL-LHC will make unsuitable for human intervention. This is particularly relevant for areas at the interface between the collider and the experiments, which house the "VAX" (vacuum assembly for experimental area) equipment. During future maintenance shutdowns, these components will be dismantled and rearranged in a series of independent modules that are adapted for handling and operation by the CERN CRANEbot.

During the test in the CMS cavern, the robot, handled by a crane, was remotely operated to locate the VAX module on its place in the support and then uninstall it.

(Continued on page 2)

A WORD FROM RAPHAËL BELLO

MOBILISING THE RESOURCES THAT CERN NEEDS TO STAY IN THE VANGUARD OF SCIENTIFIC AND TECHNOLOGICAL INNOVATION

CERN's Finance and Human Resources sector is not short of issues to be tackled, and the Member States have many expectations. How can CERN bring even greater added value to its members, to the benefit of the international scientific community and of individual countries, so that each feels comfortable that the major resources invested in CERN benefit society equally, in both the short and the long term? This is the constant collective challenge on which the sector is focusing its efforts.

(Continued on page 2)

In this issue

News 1

HL-LHC radiation protection robot passes first in-cavern test with flying colours 1

A word from Raphaël Bello 2

CERN Service Desk: At your service for ten years now 3

CERN lays the foundations for collaboration with Bosnia and Herzegovina through International Cooperation Agreement 3

The Five-Yearly Review: full steam ahead! 4

Black Quantum Futurism wins this year's Collide residency award 4

AEgIS on track to test free fall of antimatter 5

Computer Security: When "123456" is insufficient 6

Official communications 7

Announcements 8

Ombud's corner 12

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

A WORD FROM RAPHAËL BELLO

MOBILISING THE RESOURCES THAT CERN NEEDS TO STAY IN THE VANGUARD OF SCIENTIFIC AND TECHNOLOGICAL INNOVATION

This simple objective can be broken down into a whole series of actions being taken by the departments of the Finance and Human Resources sector. To give just a few examples: retaining and recruiting the best talent on the market; securing a diverse range of nationalities, genders and profiles; making the Organization more efficient, less bureaucratic and less costly; prioritising, which means both devoting more resources to the most important projects and postponing or even giving up others; working towards a "well-balanced" return, in the widest sense, for every Member State; giving renewed impetus to technological innovation to meet CERN's specific needs and promoting the spread of such innovation in society at large; becoming even more exemplary in order to reduce CERN's environmental footprint; completing the HL-LHC works and conducting a study of the feasibility of the civil engineering aspects of the FCC in order to facilitate the decision that will be taken after 2025 on the projects that will determine CERN's future; developing collaboration with the European Union, particularly as part of the Horizon Europe programme and, in the longer term, preparing to welcome the European Commission as a funding partner for our major future projects.

These specific objectives come on top of the daily work that already occupies all the teams in the Finance and Human Resources sector, who are working to ensure that CERN remains an exemplary, efficient and – above all – pleasant environment for all those who work, think and live on the campus.

My previous experience has encompassed exciting roles, mainly in the public sector, in France, Brussels and London and in some developing countries, in the field of European and international affairs, and in the financing of some major, iconic projects and cooperation programmes. Taking what I've learned elsewhere, I hope to contribute, however modestly, to CERN. I am very honoured to be joining this Organization, and I am especially enthusiastic about the prospect of working with such talented and experienced teams.

The first two years of this five-year term of office will be particularly crucial for guiding and shaping CERN's practices with a view to achieving the strategic objectives set out by the Directorate. I am committed to making a personal contribution to these objectives by acting with determination and making concrete and tangible progress. I am also, of course, counting on the teamwork of the Finance and Human Resources sector as a whole, and on the individual and collective efforts of all our colleagues across the Organization.

Raphaël Bello
Raphaël Bello is the Director for Finance and Human Resources

---

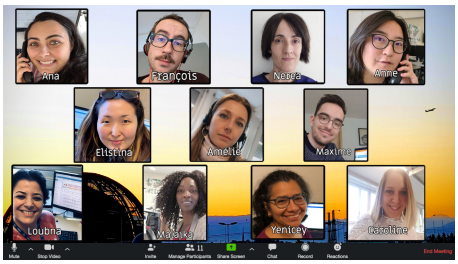
HL-LHC RADIATION PROTECTION ROBOT PASSES FIRST IN-CAVERN TEST WITH FLYING COLOURS

The robot was able to grab and release the lifting rings as well as to assist in the alignment operation on the guide pins in order to correctly reach the support. This successful test marks a significant step forward for the HL-LHC project, as innovative, automated solutions like the CERN CRANEbot will be key in tackling the significant challenges to radiological safety that the HL-LHC will inevitably pose.

Thomas Hortala

CERN SERVICE DESK: AT YOUR SERVICE FOR TEN YEARS NOW

The CERN Service Desk has been around for a decade: time to take stock!



The Service Desk team in 2021. (Image: CERN)

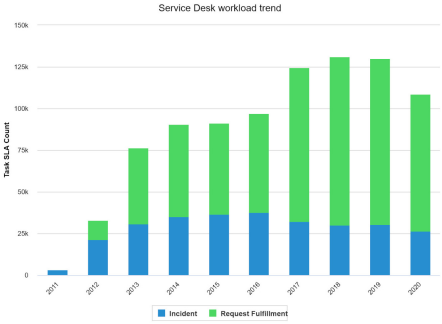
There is no denying that the CERN Service Desk has made work around the Organization more fluid since its creation in 2011 – but what exactly has the service been up to in those ten years of existence?

The Service Desk was born out of a desire to centralise requests for information and assistance from the CERN community and to process them using standard procedures, regardless of which services they related to. The goal was to ensure that international best practices of service management were applied in order to help end users, safeguard data integrity and streamline communication channels across the Organization.

Since 2011, the close-knit team of seven dedicated agents has been upholding these efficient and proven service-management principles – successfully so, as the close monitoring of the service's activity consistently demonstrates. Guiding the CERN community through the Organization's numerous services is about more than answering calls and managing tickets: the team must possess both an extensive knowledge of the Organization in all of its aspects and the distinct mental flexibility to jump between requests of fundamentally different natures: today, the Service Desk actively supports over 300 services across CERN.

Aside from these skills, contract manager Isabel Fernandez and operations manager Emilie Kirschner are keen to stress their colleagues' compassionate working style: “Our team has demonstrated great empathy and listening capabilities to provide an excellent and noteworthy service in the context of the COVID-19 pandemic.”

We wish them all the best for ten more years and beyond!



Requests to the Service Desk have consistently gone up since 2011. (Image: CERN)

CERN LAYS THE FOUNDATIONS FOR COLLABORATION WITH BOSNIA AND HERZEGOVINA THROUGH INTERNATIONAL COOPERATION AGREEMENT

The Minister of Civil Affairs of Bosnia and Herzegovina joined the ceremony to sign the cooperation agreement via videoconference on 16 February

CERN Director General Fabiola Gianotti (right) and the Minister of Civil Affairs of Bosnia and Herzegovina Ankica Gudeljević (centre) sign the International Collaboration Agreement in the presence of Charlotte Warakaulle, Director for International Relations at CERN (Image: CERN)

CERN, represented by Fabiola Gianotti, Director-General of the Organization and Bosnia and Herzegovina, represented by Ankica Gudeljević, Minister of Civil Affairs, signed an International Cooperation Agreement concerning scientific and technical cooperation in high-energy physics on Tuesday, 16 February. The ceremony was held partly remotely, with Ms Gudeljević joining Fabiola Gianotti and Charlotte Warakaulle, Director for International Relations, via videoconference.

The International Cooperation Agreement, of which CERN has signed more than 50 with countries all around the world, enables and marks the onset of governmental cooperation between Bosnia and Herzegovina and CERN in the field of science and technology for high-energy physics. The agreement serves as the framework within which further protocols and addenda will allow these relations to flourish.

While the agreement marks the *formal* beginning of this relationship with the Government of Bosnia and Herzegovina, collaboration in the form of interaction with the country's science community has been ongoing since 2009, when the University of Sarajevo made a clear commitment to collaborate with CERN. This appetite for cooperation resulted in the organisation of the

Sarajevo School of High Energy Physics as well as Bosnian participation in the summer student programme, the high-school teacher programme, and large-scale regional particle physics projects.

After Slovenia and Croatia both became Associate Member States in recent years, and Serbia became a full member of the Organization in 2019, this International Cooperation Agreement with Bosnia and Herzegovina further denotes CERN's commitment to strengthening ties with a region, the Western Balkans, whose science and physics communities have enlightened the Organization since its creation in 1954, when Yugoslavia was one of its founding members.

Thomas Hortala

THE FIVE-YEARLY REVIEW: FULL STEAM AHEAD!

A short update on the Five-Yearly Review process before its planned conclusion in December 2021

Several months have passed since our last report (*https://home.cern/news/news/cern/five-yearly-review-what-next*) on the Five-Yearly review (5YR) in June 2020, and these have been busy times. The 5YR objective is to ensure "that the financial and social conditions offered by the Organization allow CERN to recruit and retain the staff members required for the execution of its mission from all its Member States" (c.f. Annex A 1 of the Staff Rules and regulations). Detailed reports on recruitment and retention data were shared and discussed with our Member States in 2020, and while salaries are not the only component of successful recruitment and retention, their review forms an essential and obligatory aspect of the 5YR process. To this end, the benchmark of CERN Staff salaries with respect to local and international markets, with Germany and Switzerland identified as the main markets by the ISRP, is now complete. So too is the comparison with ESA, ESO, EMBL, DESY and the EC for what concerns Fellows' stipends.

Further, to ensure CERN also remains competitive in terms of employment conditions, the ISRP has undertaken a Diversity and Inclusion benchmark survey with eight organisations*. The conclusions and recommendations are now under review and consideration, and we will share the results of these studies in due course.

We now enter the final stages of the process, with a few months to go to the target completion deadline of December 2021. The D&I benchmark results, as well as the salary and stipend studies, will be formally presented to TREF respectively in March and May 2021, before onward submission to Council. Detailed *concertation* through the Standing *Concertation* Committee will aim to build concrete proposals based on the conclusions, for implementation in 2022.

We will keep you updated throughout the process. In the meantime, you will find full details of the 5-Yearly Review 2021, its content, timescales and detailed updates on the respective milestones here: https://hr.web.cern.ch/5yr-2021.

———

** EMBL, EPO, ESO, ESA, EC, ITER, UNOG, OPCW*

HR department

BLACK QUANTUM FUTURISM WINS THIS YEAR'S COLLIDE RESIDENCY AWARD

Arts at CERN selected the Black Quantum Futurism collective to complete an artistic residency between CERN in Geneva and Barcelona

Black Quantum Futurism at Community Futures Lab (Philadelphia). (Image: Kenzi Foto)

Following an international open call launched in October last year, Arts at CERN has announced the winner of the Collide residency award. Black Quantum Futurism, a collective based in Philadelphia (US), will first complete a two-month residency at CERN, followed by one month in Barcelona at the Hangar Centre for Art Research and Production, in connection with the city's scientific laboratories.

Black Quantum Futurism is a multidisciplinary collaboration between the artists Camae Ayewa and Rasheedah Phillips. The duo explores the intersections of futurism, creative media, DIY-aesthetics, and activism in marginalised communities through an alternative temporal lens. Their work focuses on personal, cultural, familial and communal cycles of experience, and their expression methods range from writing, music and film to visual art and creative research projects.

During their residency, which is planned for summer 2021*, and in dialogue with the scientists and collaborators at CERN and in Barcelona, Ayewa and Phillips will ex-

tend their research and produce a new artwork based on their proposal entitled “CPT Symmetry and Violations”. In physics, CPT symmetry stands for charge, parity, and time reversal symmetry.

“The project seeks to understand the ways in which quantum physics can influence how people think about, experience and measure time in everyday reality, exploring the possibilities that quantum physics offers beyond the limitations of traditional, linear notions of time,” explain the artists. “Through the project we will connect with scientists based at CERN to learn more about their investigations of time in physics – specifically through studying experiments being done on CPT symmetry, CERN scientists' investigations into quantum theories of gravity, and other phenomena of quantum physics as it concerns inquiries into time.”

The scope of this proposal will include a research period at CERN and a second, developmental phase in Barcelona in dialogue with various scientific laboratories and hosted at Hangar, where the artists will have the opportunity to expand their research and test its applications through Barcelona's scientific and cultural network, as well as to engage with a wide range of cultural and scientific communities.

Additionally, the jury selected three Honorary Mentions: Rosa Barba (Italy, based in Berlin), Tania Candiani (Mexico, based in Mexico City) and Dennis Dizon (Philippines, based in Barcelona). They will be invited to take part in the Guest Artist programme of Arts at CERN: a short stay at the Laboratory to investigate and research ideas to support their proposals.

Collide is an annual competition that invites artists from across the world to submit proposals for a research-led residency based on interaction with CERN's scientific community. The focus of the residency is to invite artists into the Laboratory to think, discuss, be informed and inspired, and to comprehend the challenges of fundamental research and the big questions that inform physics today. Through this process, the artists develop high-quality innovative engagement with CERN's research and community. Direct interaction with scientists is fundamental to this process.

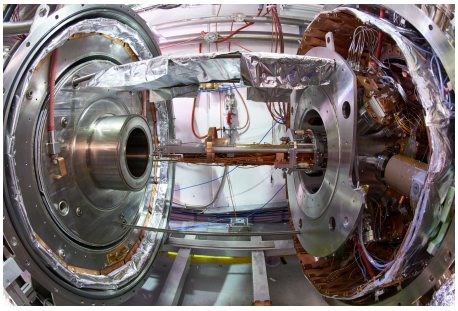
A total of 564 project proposals were received from 79 different countries for this ninth edition of Collide. The diversity, reach and quality of the proposals were remarkable and the decision was challenging.

The jury was composed of: Mónica Bello, curator and head of Arts at CERN; Stefanie Hessler, director of Kunsthall Trondheim; Lluis Nacenta, director of Hangar; Rosa Pera, independent curator; and Helga Timko, accelerator physicist at CERN. Collide has been organized in collaboration with Barcelona's Institute of Culture and Barcelona City Council since 2019 as part of a three-year collaboration (2019-2021). The next call for proposals will be launched in autumn 2021.

**If exceptional COVID-19-related circumstances impacting travel and mobility arise during the residency period, a special residency model might be adopted. In such cases, the artist and scientific partners, as well as the CERN curators, would be in remote contact over a period of up to six months or until the project's completion.*

AEGIS ON TRACK TO TEST FREE FALL OF ANTIMATTER

New technique for producing antihydrogen atoms is important milestone for measuring influence of gravity on antimatter



The AEgIS experiment is built around two powerful superconducting solenoids. (Image: CERN)

It's a fundamental law of physics that even the most ardent science-phobe can define: matter falls down under gravity. But what about antimatter, which has the same mass but opposite electrical charge and spin? According to Einstein's general theory of relativity, gravity should treat matter and antimatter identically. Finding even the slightest difference in their free-fall rate would therefore lead to a revolution in our understanding. While the free fall of matter has been measured with an accuracy of around one part in 100 trillion, no direct measurement for antimatter has yet been performed due to the difficulty in producing and containing large quantities of it.

In a paper recently published (*https://www.nature.com/articles/s42005-020-00494-z*) in the journal *Communications Physics*, the AEgIS collaboration at CERN's Antiproton Decelerator (AD) reports a major milestone towards this goal. Using new techniques developed in 2018, the team demonstrated pulsed production of antihydrogen atoms, which allows the time at which the antiatoms are formed to be pinned down with high accuracy.

“This is the first time that pulsed formation of antihydrogen has been established on timescales that open the door to simultaneous manipulation, by lasers or external fields, of the formed atoms, as well as to the possibility of applying the same method to pulsed formation of other antiprotonic atoms,” says AEgIS spokesperson Michael Doser of CERN. “Knowing the moment of antihydrogen formation is a powerful tool.”

CERN is the only place in the world where antihydrogen can be produced and studied in detail. Antihydrogen is an ideal system in which to test the gravitational free fall and other fundamental properties of antimatter because it has a long lifetime and is electrically neutral. The first production of low-energy antihydrogen, reported in 2002 by the ATHENA and ATRAP collaborations at the AD, involved the “three-body” recombination of clouds of antiprotons and positrons. Since then, steady progress by the AD's ALPHA collaboration in producing, manipulating and trapping ever larger quantities of antihydrogen has enabled spectroscopic and other prop-

erties of antimatter to be determined in exquisite detail.

Whereas three-body recombination results in an almost continuous antihydrogen source, in which it is not possible to tag the time of the antiatom formation, AEgIS has employed an alternative "charge-exchange" process whereby the formation of antihydrogen atoms is triggered by a precise laser pulse. This allows the time at which 90% of the atoms are produced to be determined with an uncertainty of around 100 ns.

Several further steps are required before AEgIS can measure the influence of gravity on antimatter, including the formation of a pulsed beam, greater quantities of antihydrogen, and the ability to make it colder. "With only three months of beam time this year, and lots of new equipment to commission, most likely 2022 will be the year in which we establish pulsed-beam formation, which is a prerequisite for us to perform a gravity measurement," explains Doser.

Following a proof-of-principle measurement by the ALPHA collaboration in 2013, ALPHA, AEgIS and a third AD experiment called GBAR are all planning to measure the free fall of antiatoms at the 1% level in the coming years. Each uses different techniques, and all three have recently been hooked up to the new ELENA synchrotron, which enables the production of very low-energy antiprotons.

Given that most of the mass of antinuclei comes from the strong force that binds quarks together, physicists think it unlikely that antimatter experiences an opposite gravitational force to matter. Nevertheless, precise measurements of the free fall of antiatoms could reveal subtle differences that would open an important crack in our current understanding.

Read the CERN Courier article (https://cerncourier.com/a/aegis-on-track-to-test-freefall-of-antimatter/) on this topic.

Matthew Chalmers

COMPUTER SECURITY: WHEN "123456" IS INSUFFICIENT

When you have confidential data to protect, a strong, long, complex and complicated password is a must

Following malicious hacks and the subsequent publication of "The Mother of all Password Dumps" containing more than 226 million unique e-mail addresses and passwords, several security companies wondered again about the naivety of humankind, the recklessness of digital natives and the incapability of human brains to memorize passwords. Indeed and in fact, the passwords that were most prevalent in the aforementioned and other similar dumps were just too easily guessable:

1. 123456
2. 123456789
3. picture1
4. password
5. 12345678
6. 111111
7. 123123
8. 12345
9. 1234567890
10. senha

Blame the users!

But it is not that simple. Unfortunately, internauts using today's World Wide Web are asked on every corner to register even when accessing the most trivial information: newsletters, downloads of free software, etc. Before being able to read a news article or launch a download, the website asks you to provide a username, e-mail address and password. Even if you won't come back a second time. Those passwords are just simple handles, tokens, with no real protective purpose as there is nothing to protect; they are purely for the sake of registration. For those cases, the simplistic passwords above are perfectly fine **as there is nothing valuable to protect**. You might even put some randomly typed letters as a password and forget about it, taking advantage of the "reset my password" procedure should you ever come back.

Alternatively, and even better for such cases, you can use the "save password" functionality integrated with your browser. For example, Firefox recognises password fields and whenever you register for a new account it will propose a randomly generated password, which it will remember for you in its built-in password manager. Other web browsers may have similar features. Or you can sign in with your Facebook or Google account* – something that more and more websites are allowing.

However, where you have confidential data to protect (i.e. your photos, documents, etc.), like on Facebook, Dropbox or at CERN, where financial data is a stake (e.g. with Amazon or your bank), where you communicate privately with your peers (think of Instagram, Signal, Twitter), or where you handle any other kind of valuable information, a strong, long, complex and complicated password is a must. The larger the variety of letters, symbols and numbers, the better. Ideally, your choice of password cannot be found in any dictionary (of any language) nor easily guessed by, for instance, appending "2021" for the year. Replacing "E" by "3" or "S" by "5" to obfuscate your dictionary word does not help, as password-cracking tools take such variations into account. Instead, your best choice is a passphrase, i.e. a sentence of words like "InXanaduDidKublaKahnAStatelyPleasure DomeDecree!" or a mathematical formula like "aˆ2+b**2=sqr(c)" – unleash your creativity. Some more password recommendations can be found on the CERN Computer Security team's homepage. And if all else fails and your brain tissue gets soft and grey, think of using a good password manager!

The CERN Computer Security team will continue to analyse any newly published breach of password databases or collection of passwords (the infamous "password dumps"). If these list your CERN e-mail address or an external e-mail address registered with CERN combined with a password or a password hash, you will get a warning that your password has been exposed. Ideally, this notification will also include the origin of the breach, i.e. the website with which that password has been registered. Unfortunately, this is not known in every case – so please don't ask if this information was not provided in your notifica-

tion. For many already public dumps, you can check yourself on “have i been pwnd?”.

2021 will also see a further improvement in password usage at CERN. Firstly, CERN is considering ending the requirement to change your password once a year. Instead, the aforementioned notification mechanism will ask you to change your password once your password appears in a breach. And secondly, CERN will further roll out the use of two-factor authentication. But more on that in a future *Bulletin* article.

**This could be seen as a way of reducing the number of accounts that you need to create but, as is the case with most cloud services, the gain in convenience is usually offset by privacy invasions. Using your Facebook or Google account to log into external services gives these two tech giants even more data to track your online activity.*

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

TAXATION IN SWITZERLAND

Memorandum concerning the 2020 internal tax annual certificate, the individual annual statement and the 2020 income tax declaration forms issued by the Swiss cantonal tax authorities

I – Internal tax annual certificate and individual annual statement for 2020

The internal tax annual certificate or the individual annual statement for 2020, issued by the Finance and Administrative processes Department, is available since 12 February 2021 via HRT (under “ My e-Documents and Self Services”). **The document that you have received (certificate or statement) d epends on your situation at CERN in 2020.** It is intended exclusively for the tax authorities.

1. If you are currently a member of the CERN personnel you have received an e-mail containing a link to your certificate or statement, which you can print out if necessary.
2. If you are no longer a member of the CERN personnel or are unable to access your certificate or statement as indicated above, you will find information explaining how to obtain one here.

In case of difficulty in obtaining your certificate or statement, send an e-mail explaining the problem to service-desk@cern.ch.

II - 2020 income tax declaration forms issued by the Swiss cantonal tax authorities

The Admin e-guide and an FAQ can be found on this page to provide further general indications for completing the 2020 income tax declaration form, and to offer support in this matter.

IF YOU HAVE ANY SPECIFIC QUESTIONS,
PLEASE CONTACT YOUR TAX OFFICE DIRECTLY.

This information does not concern CERN pensioners, as they are no longer members of the CERN personnel and are therefore subject to the standard national legal provisions relating to taxation.

NB: The information regarding the French income tax declaration form is usually available in April.

Contact: HR-Internal-tax@cern.ch

HR department

Announcements

ONLINE NETWORKING EVENT WITH START-UP DEVELOPING SUSTAINABLE NUCLEAR ENERGY ON 26 FEBRUARY AT 12 P.M.

Representatives from Seaborg Technologies will be taking your questions as part of the CERN-Alumni-organised "Company Showroom" series

(Image: CERN)

Join representatives from Seaborg Technologies to find out more about the company, potential job opportunities and the skills and talents they are now seeking. CERN Alumnus Ask Løvschall-Jensen, co-founder and COO of the fast-growing Danish start-up, will be speaking.

Seaborg Technologies employs around 30 nuclear engineers, physicists, chemists, safety experts and business developers. They own and operate a small-scale laboratory and are well underway to licensing the next generation of nuclear reactors.

The event will start at 12:00 with a general presentation and will be followed by a Q&A session. For more information including access to the conference room, visit the CERN Alumni website.

NEW SCIENTIST ONLINE EVENT: "MAKING SENSE OF QUANTUM THEORY" WITH CARLO ROVELLI

On 1 April 2021, Carlo Rovelli will give a one hour online talk on quantum theory at 6 p.m. BST / 7 p.m. Geneva Time / 1 p.m. EST, in the framework of the Big Ideas in Physics series from New Scientist.

If you are interested in attending this event, the Library can get you a ticket. Please contact library.desk@cern.ch before 11 March 2021.

The number of tickets is limited and tickets will be offered on a 'first come, first served' basis.

Visit the New Scientist website for more information on the event.

CERN Library

THE HOUSING SERVICE ADAPTS TO COVID-19 TIMES

The SCE department is temporarily opening hostel reservations to a wider public for the duration of the pandemic

Given that there are fewer people than usual staying in the CERN hostels on the Meyrin site and at the Robert Schuman residence in Saint-Genis, the SCE department is temporarily opening hostel reservations to a wider public for the duration of the pandemic.

Rooms are now available to anyone who holds a valid CERN card and has access to CERN. On the Meyrin site, 50 rooms are available every day! Please rest assured that, for your safety, the hostels have taken measures in response to the pandemic situation: cleaning and ventilation have been adapted and common spaces are not available (with the exception of the laundry, with restricted access).

CERN restaurants are not open during the weekends and in the evenings; a microwave oven, tables and chairs are available in Building 40.

Reception opening hours in the hostels are as follows:

- Building 39: 8.00 a.m. to 8.00 p.m. during the week; 8.00 a.m. to 12 noon and 1.15 p.m. to 5.00 p.m. on weekends.
- Schuman residence: Monday and Tuesday, 8.00 a.m. to 12 noon and 1.15 p.m. to 7.00 p.m.; Wednesday to Friday, 8.00 a.m. to 12 noon and 1.15 p.m. to 5.00 p.m.; closed weekends and public holidays.

Preventive quarantines can now be observed at the Robert Schuman residence in Saint-Genis (typically for people arriving from abroad and not showing COVID-19 symptoms). A kitchen is available. Grocery deliveries are possible from local supermarkets.

The residence does not accept quarantine cases linked to contact with suspected or confirmed cases of COVID-19.

Full details are available here (*https://smb-dep.web.cern.ch/fr/node/13205*).

SCE department

COME ENJOY THE RESTAURANT 1 TERRACE!

The Restaurant 1 terrace now has new furniture, providing 150 extra places to sit in compliance with the COVID-19 directives

The first two Cernois to enjoy the extended Restaurant 1 terrace on Friday, 5 February. (Image: CERN)

Since 5 February, there has been an extra reason to long for the arrival of the good weather and sunnier days. As some of you have already discovered, the Restaurant 1 terrace now has new furniture, providing 150 extra places to sit in compliance with the COVID-19 directives. So when the sun is shining, come and enjoy the terrace!

The tables have been positioned to ensure adequate distancing. **Please do not move them, as they are positioned thus for your protection.**

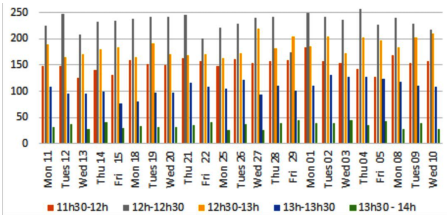
Also, did you know that in Restaurant 1 hot meals are available from 11.30 a.m. to 2.00 p.m?

Of the 850 meals served every day, two thirds are served between 11.45 and 12.45. We know that it is difficult to change habits, but as part of our efforts to minimise the chances of COVID-19 transmission, please consider coming to the restaurant after 12.45.

We know that some of you miss having dinner in Restaurant 1. While waiting for this possibility to be available again, why not try the Click&Collect service? There are two collection points: Restaurant 1 (during working hours) and the Hotel 39 reception, where you can collect your meal from Monday to Friday until 8 p.m.! **Just remember to order it before 9 a.m.**

We want to provide you with homemade, healthy food so, as from 1 March, a new range of takeaway meals will be on offer. Novae's chef is preparing some delicious new recipes: sea bream fillet and mushroom risotto. Let yourself be tempted! From 1 March, they will be available at Restaurant 1 and through the Click&Collect service.

Restaurant 1: Open from 7.00 a.m. to 4.00 p.m. (hot meals from 11.30 a.m. to 2.00 p.m.).
Click&Collect service here (*https://www.mynovae.ch/restaurant/13-self-restaurant-r1/?code=CER103*).



Restaurant 1 attendance. (Image: CERN)

The final menu will be available on 1 March. (Image: CERN)

SCE department

INFORMATION SESSION ON THE WOMEN IN TECHNOLOGY MENTORING PROGRAMME

The information session about the programme will take place online on 26 February at 1 p.m.

Women in Technology is back for a **fourth year of the WIT Mentoring Programme.**

After three successful rounds, with the last one organised in collaboration with the CERN Alumni team, WIT is offering yet another opportunity to work on your personal or professional development with CERN or Alumni mentors this year.

Mentoring is a great opportunity to develop a relationship with a senior colleague who has extended experience at CERN and a good knowledge of the organisation. Mentees can benefit from a confidential space where guidance can be offered and issues discussed.

The program is **open to anyone** with the clear motivation to work on personal and professional development. The exercise runs from **May until December 2021**.

The call for applications will be announced in wit-matters in early March.

For more details, attend the information session organised on **26 February**. In the meantime, you can get more information on the WIT webpage.

"It is much more than women supporting women, it is about creating bonds and supporting each other as members of a community." (Mentor)

"Taking part as mentee with an Alumni was a great experience. Being in touch with someone with experience outside of CERN was very valuable as the overall topics did not only revolve around CERN but more generally around career choices and 'real word' challenges." (Mentee)

"Amazing opportunity to grow, develop your full potential and acquire control over the direction of your career." (Mentee)

"I really enjoyed the opportunity to help a younger version of me and I think that both mentors and mentees have a lot to learn from each other!" (Alumni Mentor)

Get in touch at wit-mentoring-committee@cern.ch if you have further questions.

JOIN THE AUDIENCE FOR CERN COURIER'S LIVE WEBINAR AT 3 P.M. CET ON 25 FEBRUARY, HOSTED BY CERN PHYSICIST MANUELA CIRILLI

Treatment room of the CNAO hadron therapy centre (Image: CERN)

Besides the intrinsic worth of the knowledge that it generates, particle physics often acts as a trailblazer in developing cutting-edge technologies in the fields of accelerators, detectors and computing. These technologies, and the human expertise associated with them, find applications in a variety of areas, including the biomedical field, and can have a societal impact going way beyond their initial scope and expectations.

This webinar, held in partnership with Institute of Physics Publishing, will introduce the knowledge-transfer mission of CERN, provide an overview of the Laboratory's medical-applications-related activities and give examples of the impact of CERN technologies on med-tech: from hadron therapy to medical imaging, FLASH radiotherapy, computing and simulation tools. The webinar will also touch upon the challenges of transferring the technologies and know-how from CERN to the med-tech industry and medical research.

Register through the *CERN Courier* website.

***Dr Manuela Cirilli** is the deputy leader of CERN's Knowledge Transfer (KT) group, whose mission is to maximise the impact of CERN on society by creating opportunities for the transfer of the Laboratory's technologies and know-how to fields outside particle physics.*

PRÉVESSIN GAS STATION UNAVAILABLE ON MONDAY 1 MARCH 2021

Due to the painting of road markings, the Prévessin gas station will be unavailable on Monday 1 March 2021.

Thank you for your understanding.

SCE department

WEBINAR ON TUNNELLING STUDIES FOR THE FUTURE CIRCULAR COLLIDER – 24 FEBRUARY 2021

Senior engineer John Osborne will be discussing the civil engineering studies and future plans for the 100 km accelerator between 5 and 6.30 p.m CET

Registration is open on the Institution of Civil Engineers website for the webinar on tunnelling and civil engineering for the Future Circular Collider (FCC). The free, English-language online event will tackle the FCC feasibility study that is currently being conducted at CERN, as well as the tunnelling challenges associated with the large-scale project.

The discussion will be conducted by John Osborne, a senior civil engineer who is strongly involved in the FCC studies at CERN and a Fellow of the Institution of Civil Engineers (ICE).

24 February 2021
5–6.30 p.m.

Register now on the website

BOOK PRESENTATION: “SAFETY FOR PARTICLE ACCELERATORS”, BY THOMAS OTTO

We are glad to invite you to a presentation of the following book: *“Safety for Particle Accelerators”*, by Thomas Otto, Springer, 2021. The event will take place online **on Thursday 25 February at 4 p.m**.

Join us here (no registration required) or through Indico.

The author's presentation will be followed by a Question and Answers session. The book is available in paper and electronic form in open access.

Author's abstract:

Presenting an overview of the safety-related aspects of the specific technologies employed in particle accelerators, such as superconductivity, cryogenics and radiofrequency, it highlights the potential hazards these technologies pose and current prevention and protection measures.

The book covers occupational safety best practice in conventional industries for hazards related to standard technologies like electricity, pressure vessels, and machines. The text is rounded off by a section on safety management and organisation at accelerator facilities.

It's the book I would have liked to read when I started my role as Departmental Safety Officer at CERN 10 years ago.“This open access book offers a first introduction to safety at accelerator facilities. It is directed to managers, scientists, technical personnel and students working at current or future accelerator facilities.”

Presenting an overview of the safety-related aspects of the specific technologies employed in particle accelerators, such as superconductivity, cryogenics and radiofrequency, it highlights the potential hazards these technologies pose and current prevention and protection measures.

The book covers occupational safety best practice in conventional industries for hazards related to standard technologies like electricity, pressure vessels, and machines. The text is rounded off by a section on safety management and organisation at accelerator facilities.

It's the book I would have liked to read when I started my role as Departmental Safety Officer at CERN 10 years ago.

We hope to see many of you!

CERN Library

Ombud's corner

THE JUDGMENT OF SOLOMON

King Solomon was unable to reach a verdict in a conflict between two women, both of whom claimed to be the mother of a newborn child, so he ordered that the child be cut in two, knowing that the woman who gave up the child to save its life would be the true mother.

Solomon, as an experienced monarch, was probably used to listening carefully to all sides involved in a dispute, especially those with whom he did not agree, and his ruling, which was surprising to say the least, was certainly not the obvious solution at the outset. And as for enforcing the judgment, he skilfully predicted that one of the two women would give up her newborn child.

Closer to home, the ability to make the right judgment – in other words, to take the best possible decision based on the available information – is one of the mostly highly prized qualities in a manager.

Unfortunately, there is no matrix for assessing our ability to deliver a good judgment. Nevertheless, the literature pinpoints five essential qualities, all of which we find in the story of Solomon: listening, garnering diverse opinions, drawing on relevant experience, considering all the options and determining the feasibility of the sentence.

Active listening avoids the prejudice pitfall and makes it possible, through questioning, to obtain information that was not immediately forthcoming.

Diversity is the art of surrounding yourself with people who think differently to you and go against the general trend. Caught up in the general optimism of the era, nobody dared to question that the Titanic was "unsinkable". There were not enough lifeboats, and those that there were, were purely decorative. We know how that story ended.

Experience is not necessarily an indicator of competence: someone can have a lot of experience but in an area that may not be relevant. I may be highly experienced in procurement for industrialised countries, but not for developing countries.

Many bad decisions are taken in the belief that there is no other option or that there is only one valid solution among all the possible options. Innovative company 3M is renowned for pushing its staff to consider and evaluate all the possible options, regardless of how feasible they seem at first sight.

After all, what is the point of outlining amazing projects on paper if they aren't accompanied by a rigorous assessment of their feasibility in real life? Ferdinand de Lesseps learned to his cost that digging a canal through the rainforests of Panama was a much bigger feat than digging the Suez Canal through sand dunes.

Next time you have to deliver a judgment, remember to gather a range of contradictory views, draw on your relevant experience, don't rule out any option in advance and carefully evaluate the feasibility of the solution. That's how you up your chances of making the right call!

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.