

LHC REPORT: FOCUS ON LUMINOSITY

The intensity ramp-up of the LHC beams resumed last Friday after the main powering system of the PS accelerator was put back in service.



The image above shows the last twenty four hours of fill #4947 in the machine. The LHC operations team kept the beams of this fill in the machine for a record 35 and a half hours.

Beams are back in the LHC. On Friday, the accelerator resumed the intensity ramp-up, reaching 1752 bunches per beam last weekend. The intensity ramp-up was interrupted on 20 May because of a problem with the PS's main power supply (see box).

A steady increase in the total number of bunches per beam is required to check out all aspects of beam operation and make sure the LHC is fully safe before the nominal number of bunches per beam can be brought into collision.

At present, four intensity steps have been completed: 313, 601, 889, and 1177 bunches per beam. The qualification of the next step with 1752 bunches is in progress. At every step, more than 20 hours in stable beams

must be accumulated, as required for machine protection qualification. The last step-ups already showed signs of possible electron cloud effects, with the typical signature of blown-up bunches at the end of the trains of 72 bunches. The beam and luminosity lifetimes are, however, very good: the last LHC fill before the extended stop due to the PS powering system problem was with 1177 bunches per beam and stayed in Stable Beams for 35.5 hours. The peak luminosity at the beginning of Stable Beams was $3.6 \times 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$. The integrated luminosity, 272 inverse picobarn, is around a quarter of the total luminosity delivered by the LHC up to now in 2016.

Monday, 17 and Tuesday, 18 May were dedicated to measuring the absolute scale of the luminosity at 13 TeV. The luminosity of a

(Continued on page 3)



A WORD FROM ECKHARD ELSEN

WHAT MAKES CERN'S RESEARCH GREAT

As a newcomer to CERN, I find myself both honoured and humbled to have had the role of Research Director confided in me for five years.

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A WORD FROM ECKHARD ELSSEN

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WHAT MAKES CERN'S RESEARCH GREAT

My career has taken me from Hamburg to Stanford and Heidelberg and back to Hamburg, and although this is the first time I have been based at CERN, it is not my first involvement with the Laboratory. I was a member of the OPAL collaboration in the late 1980s, and chaired the LHCC from 2011 to 2014. In addition, over the past ten years I have enjoyed contacts with many colleagues at CERN, via joint European programmes and particularly in discussions on linear colliders.

In this, my first message to personnel, I'd like to set out my view of what makes CERN's research great, and where I'd like to see things when I step down at the end of 2020. First and foremost, I have to refer to the many excellent experts at CERN and to the thousands of users of our facilities. Their ideas are the backbone of all CERN activities and I very much value their input. As to the scientific programme, it goes without saying, of course, that the LHC is this laboratory's flagship, so it has been very good to see the machine coming out of its winter slumber over the last few weeks. We're in for a very exciting year with the LHC. For one thing, the tantalising 750 GeV 'bump' seen by both ATLAS and CMS in their 2015 data will be resolved either as a real peak, or as the chimera of a statistical fluctuation. Whatever the case, both experiments are painstakingly writing up their 2015 analyses of this

phenomenon, as the scientific method dictates, so whatever happens, things will be absolutely transparent.

Bump or no bump, there will be a rich harvest of physics to be brought in from the 2016 data as we extend sensitivity in energy and mass reach. Both ATLAS and CMS have teamed up with their smaller neighbours, bringing forward physics into the mainstream LHC programme, and with all four of the major experiments taking data with lead ions, it's fair to say that heavy-ion physics has also become mainstream.

The LHC programme alone is rich and diverse, but there's much more to CERN than the LHC. From the East Area to the North Area, from the AD to ISOLDE and n_TOF, CERN supports a vast spectrum of world-class research, and our facilities are constantly developing to accommodate the evolving needs of our research community. To this end, ELENA will soon be providing much more intense beams of antiprotons for the AD experiments, and – pending financial support being secured – we also have the opportunity in the near future of bringing the Test Storage Ring (TSR) from Heidelberg to HIE-ISOLDE to increase the intensity of its beams by several orders of magnitude. The CERN neutrino platform established in 2015 serves as a focal point for European physicists to participate

in neutrino programmes in the US and Japan, and creates an environment to explore and qualify the technologies needed for the large-mass detectors these programmes require. These are all very exciting developments for CERN's future scientific diversity. Nevertheless, with the unique array of facilities, we can always be open to new ideas, and that's why we'll be holding a meeting late this summer to study the potential for increasing the diversity of our research even further – an initiative that goes by the name of "Physics beyond colliders".

My full title is Director for Research and Scientific Computing, so I'm very conscious that by focusing on the experimental programme, I've only covered part of my remit. Theory and computing will form the basis of future messages, but for now I'd like to end by saying that it's my sincere pleasure to step into a lab with such breadth and depth of research. I am excited by the physics prospects of the coming years and while the LHC will continue to be the physics workhorse at the energy frontier, it is time to prepare a long-term vision for particle physics that can be cast into a strategy at the end of my five-year term in office.

*Eckhard Elsen,
Director for Research and Computing*

LHC REPORT: FOCUS ON LUMINOSITY

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collider is a very important parameter because the precision obtained in measuring a given physics process's production cross-section depends critically on the accuracy with which the luminosity is known. The luminosity is also the figure of merit used to benchmark the efficiency of the collider's operation day by day.

Special beam optics and beam parameters are necessary to perform this task; both are tailored to get the smallest possible uncertainty in the measurement. The method is pretty simple and very old. Using a technique pioneered by Simon van der Meer in 1968 at CERN's Intersecting Storage Rings, the inelastic proton-proton collision rate is monitored by dedicated luminosity detectors at the experiments as the beams are moved across each other, first in the

horizontal and then in the vertical direction. This "VdM scan" provides a measurement of the beam-overlap area, which is proportional to the transverse beam size, the first ingredient needed to solve the luminosity equation. The second main ingredient is the simultaneous precision measurement of the bunch currents in the LHC, which is performed using different devices from the machine and the experiments. This information, combined with the total number of bunches per beam, provides a direct calibration of the experiment's luminosity detectors at a single point in time.

The first "VdM scan" fill, which lasted just over 9 hours, was devoted to the luminosity calibration of ALICE and then LHCb. The second fill, which lasted 7 hours, allowed the luminosity

calibration of ATLAS. The luminosity calibration of CMS was completed last Friday.

With beam back from the PS last Thursday, the first step for the LHC was a couple re-qualification fills with low intensity. Following these fills, CMS's luminosity calibration was swiftly completed, and the intensity ramp-up re-joined. At present, the LHC is working with 1752 bunches per beam which gave a storm interrupted weekend peak luminosity of $5.3 \times 10^{33} \text{ cm}^{-2}\text{s}^{-1}$. The integrated luminosity for the year has now passed a hard-won inverse femtobarn..

*Reyes Alemany Fernandez
for the LHC team*

The PS, POPS and the famous rotating machine

CERN's PS has a big challenge powering the main magnets. The power applied to the magnets is $\pm 40 \text{ MW}$, with a repetition rate of 2.4 seconds. The minus sign is important here. As these magnets are ramped down from top energy, the stored magnetic energy has to be handled somehow. The solution until 2011 was the famous rotating machine – a motor-generator set that stored the energy in a flywheel during the ramp-down and made it available again via the generator on the

ramp-up. The modern solution is POPS – here large capacitor banks housed in dedicated containers provide the energy storage mechanism. It should be borne in mind that the PS executes around 15 million cycles per year!

On 27 April, POPS suffered a short circuit in one of its six capacitor containers. To bridge the repair, the PS switched swiftly to the back-up rotating machine and operated

normally until 20 May when, unfortunately, a malfunctioning isolator switch rendered it inoperable for a couple of weeks. The power converter team, who were in the process of understanding, repairing and mitigating the POPS problem, have had to execute a crash programme of measures to get POPS safely back into operation as soon as possible. This was achieved on Thursday 26 May.

NEW TOOL IN PLACE TO SUPPORT AUTHORS AND CERN AS A PUBLISHER

CERN has published the *Yellow Reports* since the inception of the Laboratory. Until now this activity has followed a traditional, largely manual publishing workflow. Thanks to its new publishing platform, the CERN Publishing Service now offers a modern tool to the CERN community for its in-house publishing needs, managing the publication workflow from the submission of manuscripts to peer-review and publication.

Like every scientific institution, CERN has the important task of communicating its work, discoveries and achievements via publications in journals, the proceedings of conferences and books. For material that is not submitted to a third-party publisher, which is often the case for reports and in some cases for proceedings, the CERN Publishing Service supports the workflow with a dedicated Publishing Platform based on open-source software, Open Journal System, developed by the Public Knowledge Project (PKP) and

currently used by thousands of institutions all over the world.

Now available to all CERN users, this Publishing Platform supports many services, ranging from editorial management (submission, peer-review, copy-editing, layout and proofreading of manuscripts) to publication tasks. "Once a document has been submitted to one of our publications, the editor receives an automatic message, so that he or she can manage the peer-review process and

assign reviewers to the job," explains Nikos Kasiousis, who is responsible for the technical aspects of the platform. As with classical scientific journals, the peer-review process can be done in different ways, including a double-blind peer-review. The papers can be accepted, conditionally accepted with requests for revisions, or rejected. Once a paper is accepted, if required by the specific workflow, it goes into production (copy-editing, layout and proofreading).

When the manuscripts are ready, the platform itself can be used to make them publicly available. "For the moment, the platform hosts three official CERN publications: the CERN Yellow Reports, the Annual Reports and the IdeaSquare Journal of Experimental Innovation," says publisher Valeria Brancolini.

"Each publication has its own homepage, where specific information about the publication itself (Editorial Board, publication guidelines, copyright policy, etc.) is displayed." The articles can be viewed, downloaded and shared in different ways, statistics can be gathered and the system can automatically assign Digital Object Identifiers (DOIs). For each new volume/issue, an alert can be sent out to subscribers.

To make the authors' lives easier, the Publishing Service provides tailor-made guidelines. The team can also advise editors

on copy-editing services and help with the indexing of publications in the relevant bibliographic databases. The system itself makes it easy for authors and editors to keep track of the status of the articles, as it sends automatic messages at each step. And of course, all the files and different versions are archived on CDS.

"The Publishing Platform is and will continue to be in constant evolution," concludes Nikos. "We look forward to improving it and fulfilling users' expectations wherever possible, so they should not hesitate to contact us with

any suggestions. In particular, this tool offers interesting possibilities for anyone at CERN involved in the publication of conference proceedings."

If you would like to know more about the Publishing Platform, please contact Valeria Brancolini: Valeria.Brancolini@cern.ch.

Anaïs Schaeffer

UNDERSTANDING PARKING HABITS AT CERN

The SMB department is setting up a monitoring system in certain CERN car parks in order to evaluate their occupancy rates and subsequently make them easier to use.

Vehicle registration plate readers are now installed at the entrances and exits of the *Les Cèdres* car park and of the Building 4 and 5 car park, both on the Meyrin site. The information collected by these readers will allow the occupancy levels of these car parks to be analysed throughout the day, establishing periods of peak usage and the pattern of vehicle movements.

"We have been experiencing parking problems at CERN for several years now and have decided to gather concrete data in order to study these issues in more detail," explains Didier Constant, head of the security service.

"The vehicle registration plate readers will allow us to find out more about parking habits in this very busy area and to identify solutions to make it easier to use these car parks." To this end, a web portal will be introduced at a later stage, on which drivers will be able to see the occupancy levels of the car parks in real time thanks to a colour-coded system: green for low occupancy, orange for medium occupancy and red when the car park is full.

The registration plate readers will also allow the study of the impact of "limpet cars", i.e. vehicles that are parked on the CERN site for long periods, which is prohibited under

Operational Circular No. 2: "Conditions of access to the fenced parts of the CERN site". "We have created long-term car parks on the Meyrin and Prévessin sites precisely to avoid these 'limpet cars' taking up parking spaces in critical areas," explains Didier Constant. To submit a request for long-term parking, go to the CERN Service Portal and create a ticket.

The registration plate readers will be operational from the start of the summer. At a later stage, two other car parks (next to Building 40 and the so-called "high-voltage" car park) will also be equipped with registration plate readers.

Anaïs Schaeffer

ONE WOMAN'S JOURNEY IN PHYSICS

Renowned theoretical physicist Mary K Gaillard delivered a scientific seminar and presented her book "A singularly unfeminine profession" at CERN.



Mary K Gaillard discussing the role of women in the fundamental physics field with Valerie Gibson.

Mary K Gaillard began her career at the CNRS institute in France in the 1960's, at a time when women physicists in research institutes could be counted on the fingers of one hand. She first came to CERN with her husband in the late 1960's and stayed as a scientific visitor for many years, while still employed by the CNRS. In 1981, she joined the physics faculty at the University of California at Berkeley (UCB), becoming the first woman to hold a tenured position in the faculty.

Gaillard not only made major contributions to the Standard Model of particle physics, such as the prediction of the mass of the charm quark and to the famous paper coining the term penguin diagram, she was also the first to address gender imbalance at CERN:

for International Women's Day in 1980, she published a report on women in scientific careers at CERN, an essay surveying the way in which women in scientific careers at CERN viewed their professional situation. This report was an important resource for a working group set up in the 1990s to study the situation of women at CERN. On this group's recommendation, CERN established its Equal Opportunities programme, which has now grown into today's Diversity Office.

Closing the circle, the Diversity Office, together with the CERN Library and the Theory Department invited Gaillard to deliver a Theory seminar on quantum effects on supergravity theories, and to give some insight into the genesis of her book and her

journey in physics. "Her frank autobiography, *A Singularly Unfeminine Profession*, is an honest, revelatory account of her many discoveries, made as she battled gender bias and faced the demands of raising three children," said Valerie Gibson, Head of High Energy Physics and Fellow of Trinity College Cambridge in her review of the book in *Nature*. Professor Gibson complemented Gaillard's presentation with her own experiences and views on the challenges facing women making a career in physics.

The conclusion of both women is that the situation has improved at CERN, as well as in academia in general, but there is still a long way to go, especially when it comes to women in senior positions and leadership roles. From one solitary female member of the faculty at UCB when Gaillard took up her post in 1981, the number has risen to five. Meanwhile, the number of young women completing physics PhD programmes climbed through the 60s, 70s and 80s to around 16%, where it has since levelled off.

Gender stereotypes are all around us, and as Gaillard points out, "There seems to be a problem, starting with very young children." As with any problem, the first step towards a solution is acknowledging that the problem exists, and Mary K Gaillard's presentation served as a timely reminder that while progress has been made, there's still much to do in particle physics, as in many areas of society.

The book can be borrowed from the CERN library, bought at the CERN library (bldg. 52, 1st floor) or accessed online on the publisher's website (World Scientific) (free of charge for anyone with a CERN account).

Kristin Kaltenhauser and James Gillies

A TOUR IN SIGN LANGUAGE

In early May, CERN welcomed a group of deaf children for a tour of *Microcosm* and a *Fun with Physics* demonstration.



On 4 May, around ten children from the *Centre pour enfants sourds de Montbrillant* (Montbrillant Centre for Deaf Children), a public school funded by the *Office médico-pédagogique du canton de Genève*, took a guided tour of the *Microcosm* exhibition and were treated to a *Fun with Physics* demonstration.

The tour guides' explanations were interpreted into sign language in real time by a professional interpreter who accompanied the children, and the pace and content were adapted to maximise the interaction with the children. This visit demonstrates CERN's commitment to remaining as widely accessible as possible. To this end, most of CERN's visit sites offer reduced-mobility access. In the past few months, CERN has also welcomed children suffering from *xeroderma pigmentosum* (a genetic disorder causing extreme sensitivity to UV light) and blind adults.

François Briard

CERN'S ANNUAL RELAY A RUNAWAY SUCCESS

With a record participation of 128 teams of six runners each, this year's CERN Relay Race took place on 19 May on the Meyrin site.



With a record participation of 128 teams and 768 runners, this year's CERN Relay Race took place on 19 May on the Meyrin site. The teams were mainly composed of CERN staff or contractors working on the CERN site. A few external teams took also part in the race. Times ranged from 10 min 19 s to over 18 min.

The Running Club website now has both the results, and the photos from race day.

The CERN Relay Race is jointly organised every year by the CERN Running Club and the Staff Association. It is a tradition that is appreciated by many as a team building, rather than a competitive event.

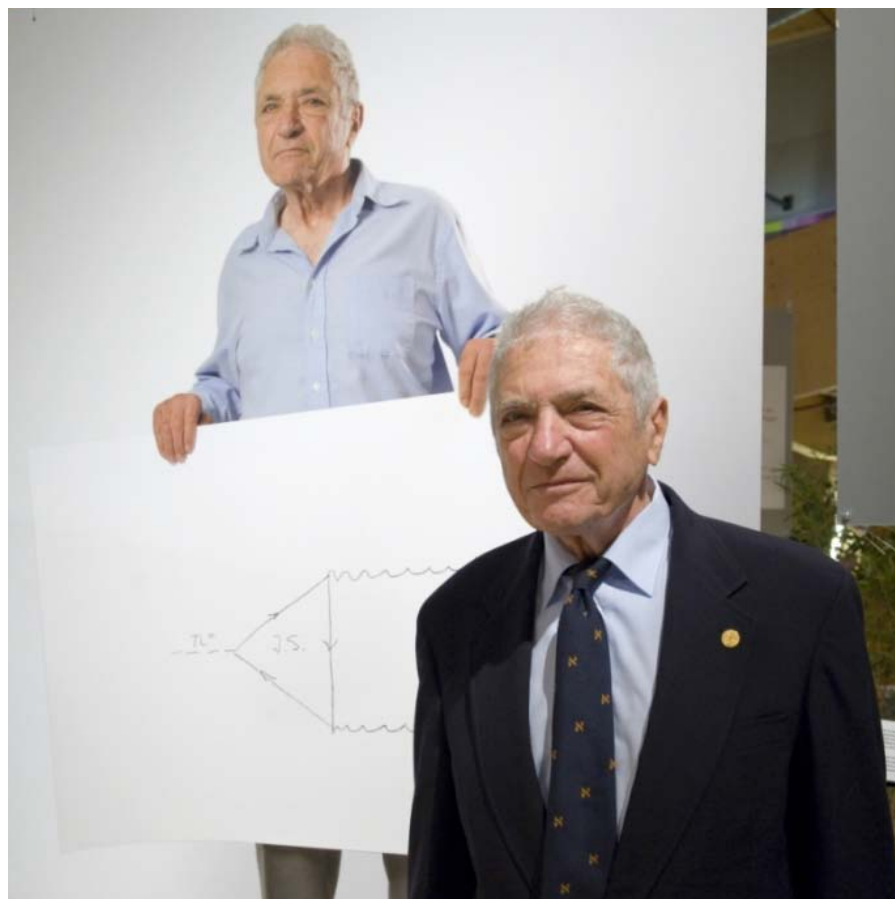
The CERN Running Club wishes to thank all runners and all volunteers for making this event a success.

Klaus Hanke for the CERN Running Club

One of the many winning teams from the 2016 relay race. (Image: Sophia Bennett/CERN)

HAPPY BIRTHDAY, JACK STEINBERGER

Even if he's recently stopped coming to CERN on his bike, Jack Steinberger and his piercing blue eyes are still regular visitors to our corridors. As he celebrates his 95th birthday, we pay tribute to one of CERN's greatest scientists.



Jack Steinberger in 2008, pictured on the occasion of the "Accelerating Nobel" exhibition. (Image: Claudia Marcelloni/CERN)

Jack emigrated from Germany to the United States in 1934 to escape the persecution of the Jews. He later went on to study under Enrico Fermi in Chicago and in the 1950s, he contributed to the development of bubble chambers. Using this new detection apparatus, he was involved in the myriad discoveries and results that led to the construction of the Standard Model. In 1961, while at Columbia University (New York), he took part in the first experiment with a high-energy neutrino beam, which gave rise to the discovery of the muon neutrino. This discovery was awarded the 1988 Nobel Prize for Physics, which he shared with Leon Lederman and Melvin Schwartz. In 1968, Jack Steinberger joined CERN and took part in the first CP violation experiments.

But perhaps his proudest achievement at CERN was the CDHS experiment, which he led during the 1970s and 80s. CDHS used a neutrino beam from the SPS to plumb the depths of matter and, in so doing, produced many results. Jack Steinberger was subsequently appointed spokesperson of the ALEPH experiment at the Large Electron-Positron collider, LEP. He took a step back from front-line research in the 1990s, but curiosity does not fade away with age and Jack continues to study a range of subjects, from cosmology to climate change.

CERN Bulletin

PIMP UP YOUR PASSWORD

In the past, we have repeatedly stated the importance of a well-chosen, complex and unique password, for your account at CERN (see the article “Oops, there it goes...”), but also for your accounts on Facebook, Amazon and all other sites (see the article “The value of your password”). While this is all still valid, it might not be enough anymore...

Of course, making your password complex (with letters, symbols, numbers, using mathematical formulas, song titles or poems) is still a must. It is still a necessity to avoid using the same password for several sites and essential not to share the password with anyone else (“your password is your toothbrush - you don’t share it and you change it regularly”). But this is not always sufficient. Passwords can be cracked not only through guessing or brute-force dictionary attacks (hence the requirement for a complex password not to be found in any dictionary) but also just by sniffing. An attacker can sniff out a simple password as easily as a complex one just by installing some keyboard logging software on your computer. “Stop, think, don’t click” is the only way to protect ourselves from such attacks and their consequences: do not click on suspicious links, only click if you trust their source. Unfortunately, as our latest clicking campaign has shown (“One click and BOOM...”), far too many of us are still clicking on malicious links, so putting such a keylogger in place would be easier than we would like for an attacker in our environment. The campaign showed that an attacker could easily have taken control of 10 to 20% of all Windows computers at CERN and could have sniffed out a large number of CERN passwords...

The consequences? Severe, if you manage computing services, operate accelerators or experiments, or handle CERN’s finances! Once they own your password and the attached rights, the attackers would just sit and listen. They would take the time to understand how you work. They would observe when and how you access your resources and services. They would gather information. And when the time came, they would be in a position to impersonate you and strike hard: they could try to bring down your computing service, manipulate your accelerators or experiment, or steal money – to your dismay and to the harm of the Organization.

The silver bullet? Pimping up your password (i.e. something you know)! Then enhancing it by using an additional second token - namely something you have: a piece of hardware like your smartphone, your CERN access card, or a dedicated USB stick. Banks very often ask their customers to use a small card reader to authenticate themselves. In technical jargon, this is called multifactor authentication, and in collaboration with the IT department, the BE department and the FAP/AIS group, we are looking into how to use such authentication methods to better protect access to computing services, financial systems and the accelerator network and its control systems.

Of course, this will cause some inconvenience, but we will strive to make it as seamless and simple as possible. A little bit more time at login for much more security while working – is that a fair trade-off? For more details, check out this dedicated webpage: cern.ch/go/sF8j or contact us at Computer.Security@cern.ch.

Think also of the value of your passwords at home: those you use for Facebook, Twitter, Google and Amazon, for example. What havoc could attackers create in your private life if they knew your passwords? They could enter your private sphere, post in your name, spend your money, etc. For reasons similar to the ones that drove CERN to turn to multifactor authentication, Google, Facebook and others allow you to opt in to such authentication too. We strongly recommend that you benefit from this, for your own protection.

For further information, questions or help, check: <https://security.web.cern.ch> or contact us at Computer.Security@cern.ch.

Do you want to learn more about computer security incidents and issues at CERN? Follow our Monthly Report: https://security.web.cern.ch/security/reports/en/monthly_reports.shtml

Stefan Lueders, Computer Security Team

"IT'S NOT FAIR..."

The perception of unfair treatment in the workplace can often lead to conflict and a sense of demotivation, which ultimately leaves us feeling discouraged and helpless. What are some of the strategies that would allow managers to prevent or limit the risk of allowing these situations to develop or, on the other hand, as colleagues facing these circumstances, to cope with these feelings and to move on?

'Life is unfair' is the response that we tend to hear in such situations, often accompanied by a shrug of the shoulders that suggests that we are exaggerating, and should just accept this as an unavoidable part of life! This statement, although widely repeated, brings little comfort to people who are struggling to make sense of a decision that has left them with a bitter sense of injustice or rejection. On the contrary, it only serves to amplify the feelings of anger or frustration generated by a perception of unfair treatment, which, if allowed to fester, may lead to diminished morale and potentially affect the performance of entire teams.

This feeling of unfairness is often triggered when our expectations are not met. Such situations typically arise when we believe we should be selected for a particular role or that we deserve a promotion that is given instead to somebody else. Moreover, if we do not get any clear feedback as to the reasons for this choice, the message we take away is one of rejection: our qualities are not recognised and our work is not fully appreciated. If, in addition to this rejection of our competence, our attempts to share our concerns are shrugged off as being of no interest, the message is amplified into a rejection of our intrinsic value as people and colleagues, with much longer-lasting negative consequences.

A much more effective response for us, as managers, would be to show empathy by acknowledging our colleagues' disappointment and trying to get to the

bottom of their reasons for feeling unfairly treated. But what is it that keeps us from doing this in all cases? Is it because such an action would necessarily force us to re-examine our own decisions and to lay bare the criteria by which we make our choices in an open and transparent fashion? Could it be that we are sometimes not even fully aware of our reasons or that we hesitate to face up to the unconscious biases that may have swayed our judgement? Or could it be, on the other hand, that we believe that we are shielding the other from further disappointment by not revealing the full details underlying our evaluation of the situation?

Whatever the reasons that tempt us to brush off the other's reactions, if we are able, as managers, to put aside our own concerns, and use the 'fairness triangle' to consider all the facts, perspectives and people concerned, particularly when this implies acknowledging feelings and sharing honest feedback, or even re-evaluating our own position and perhaps adjusting our decisions, we stand a much better chance of preserving the relationship, regardless of the final outcome. However, all these actions would require a truly honest commitment on our part as managers to make the best possible decision on objective grounds.

At the other end of the spectrum, what can we do, as colleagues and staff who feel unfairly treated, to manage our disappointment and learn to move on? Of course, we can also trigger the 'fairness triangle' and initiate a

discussion to seek clarification, put forward our own point of view and try to understand the situation from the manager's perspective. However, this also implies a genuine willingness to listen and challenge our own thinking in order to understand the full picture: What can we learn about ourselves and how realistic were our own expectations? What can we learn from the choice of the successful candidate and does it point to areas in which we can develop? How can the manager support us in reaching our goals in the future?

Inevitably, despite all these efforts, there will be some situations where these questions bring no satisfying answers and the feeling of unfairness persists - what then? Should we have recourse to the processes that the Organization provides to support us in this case? Do we wish to request an informal mediation with the support of the Ombud? What are the formal review or appeal processes by which we can seek a more equitable outcome? What do these processes entail and how do they fit with our overall goals and values, and at what cost to ourselves? What support do we need in deciding what to do? These are some of the options we need to consider carefully in going forward to seek resolution.

Regardless of the actions that we decide to take, in the final analysis, it is only with integrity, on both sides of the equation, that we can hope to remain true to our personal and Organizational values, and move on!

All previous Ombud's Corners can be accessed in the Ombud's blog: <http://cern.ch/go/p9ZS>.

Sudeshna Datta-Cockerill

112TH ACCU MEETING

Agenda for the meeting to be held on Tuesday, 7 June 2016 at 9.15 a.m. in room Georges Charpak (Room F, 60-6-015).

1. Chairperson's remarks
2. Adoption of the agenda
3. Minutes of the previous meeting
4. News from the CERN Management
5. The new International Relations sector
6. Report on services from IT department
7. Results of Users' Survey on Communication
8. Questions and Answers on UBS Issues
9. Report on services from SMB Department
10. Users' Office News
11. Matters arising
12. Any Other Business
13. Agenda for the next meeting

Anyone wishing to raise any points under "Any Other Business" is invited to send them to the Chairperson (**Dragoslav.Lazic@cern.ch**) or to the Secretary (**ACCU.Secretary@cern.ch**).

Michael Hauschild (Secretary)

ACCU is a forum for discussion between the CERN Management and representatives of the CERN users in order to review the practical means taken by CERN to support the work of Users of the Laboratory. The User Representatives to ACCU are:

- **Austria** M. Jeitler (**manfred.jeitler@cern.ch**)
- **Belgium** M. Tytgat (**michael.tytgat@cern.ch**)

- **Bulgaria** N.N.
- **Czech Republic** S. Nemecek (**Stanislav.Nemecek@cern.ch**)
- **Denmark** J.B. Hansen (**Jorgen.Beck.Hansen@cern.ch**)
- **Finland** K. Lassila-Perini (**Katri.Lassila-Perini@cern.ch**)
- **France** F. Ferri (**Federico.Ferri@cern.ch**) and A. Rozanov (**Alexandre.Rozanov@cern.ch**)
- **Germany** K. Rabbertz (**Klaus.Rabbertz@cern.ch**) and I. Fleck (**fleck@hep.physik.uni-siegen.de**)
- **Greece** D. Sampsonidis (**Dimitrios.Sampsonidis@cern.ch**)
- **Hungary** V. Veszprémi (**Viktor.Veszpremi@cern.ch**)
- **Israel** E. Etzion (**Erez.Etzion@cern.ch**)
- **Italy** C. Biino (**Cristina.Biino@cern.ch**) and C. Troncon (**Clara.Troncon@cern.ch**)
- **Netherlands** G. Bobbink (**Gerjan.Bobbink@cern.ch**)
- **Norway** K. Røed (**Ketil.Roed@cern.ch**)
- **Poland** K. Bunkowski (**Karol.Bunkowski@cern.ch**)
- **Pakistan** W. Ahmed (**Waqar.Ahmed@cern.ch**)
- **Portugal** F. Barão (**Fernando.Barao@cern.ch**)
- **Romania** J. Maurer (**jmaurer@cern.ch**)
- **Serbia** D. Lazic (**Dragoslav.Lazic@cern.ch**, Chair)
- **Slovak Republic** A. Dubnicková (**Anna.Dubnickova@cern.ch**)
- **Spain** S. Goy (**Silvia.Goy@cern.ch**)
- **Sweden** E. Lytken (**Else.Lytken@cern.ch**)
- **Switzerland** M. Dittmar (**Michael.Dittmar@cern.ch**)
- **Turkey** B. Demirköz (**Bilge.Demirkoz@cern.ch**)
- **United Kingdom** R. Jones

- (**Roger.Jones@cern.ch**) and H. Hayward (**helen.hayward@cern.ch**)
- **Non-Member States** U. Mallik (**usha-mallik@uiowa.edu**), H. Zaraket (**hzaraket@ul.edu.lb**), M. Sharan (**manoj.kumar.sharan@cern.ch**) and N. Zimine (**Nikolai.Zimine@cern.ch**)
- **CERN** W. Lerche (**Wolfgang.Lerche@cern.ch**) and M. Ferro-Luzzi (**Massimiliano.Ferro-Luzzi@cern.ch**)

CERN Management is represented by Fabiola Gianotti (Director General), Martin Steinacher (Director for Finance and Human Resources) and Eckhard Elsen (Director for Research and Computing). The Experimental Physics Department is represented by Catherine Decosse and Doris Chromek-Burckhart (Head of the Users Office), the Finance and Administration Processes Department by Gregory Cavallo, the Human Resources Department by Ingrid Haug, the Information Technology Department by Mats Møller, the Site Management and Buildings Department by Reinoud Martens, the Occupational Health Safety and Environmental protection Unit by Simon Baird, and the CERN Staff Association by Juan Garcia Perez.

Secretary: Michael Hauschild.

Other CERN staff members attend as necessary for specific agenda items. Anyone interested in further information about ACCU is welcome to contact the appropriate representative, or the Chairperson (**Dragoslav.Lazic@cern.ch**) or Secretary (**ACCU.Secretary@cern.ch**).

<http://cern.ch/ph-dep-ACCU/>

Take note

SUMMER MINI ATOMIADÉ IN JUNE 2016

The Mini Atomiade are coming to CERN! Members of Clubs supported by the CERN Staff Association and in conjunction with ASCERI (Association of the Sports Communities of the European Research Institutes) will be organising the summer games at the beginning of June.

ASCERI aims to contribute to a united Europe through regular sports meetings, bringing together members of public Research Institutes at European level. The Association's members come from over 40 Research Institutes spanning 16 countries. Numerous

sports and leisure activities are represented at regular events and each tournament is organised by a different research institute.

Clubs in conjunction with the CERN Staff Association have sent teams to previous winter and summer games and now, the CERN Club's Coordination Committee (CCC) has taken on the challenge of organising a Mini Atomiade from Friday 3 June to Monday 6 June 2016 in Divonne-les-Bains.

The games are made up of four different tournaments/competitions: Small Field Football, Golf, Tennis and a 10 km running race. During the day, participants will be busy with their sport activities and in the evening, a well-earned dinner will be followed by entertainment courtesy of the CERN MusiClub and the CERN Jazz Club.

The Mini Atomiade is also a meeting place of sport and culture, which creates links between institutes and offers a strengthened sense of community and camaraderie. These interactions among colleagues also lead to improved communication, a better understanding of colleagues' roles and more effective collaboration. The benefits expected from this project comprise of the increased visibility of CERN amongst the 40 research institutes. The ASCERI sports events provide an excellent possibility for team building amongst members of the CERN team internally and with those of the participating institutes. They furthermore strengthen links with the local community if the games are organised in Divonne-les-Bains.

You are all welcome to cheer on the tennis players on Saturday 4 and Sunday 5 June from

09:00 to 15:00, the football teams on Saturday 4 and Sunday 5 June from 09:00 to 17:00 as well as those running 10km around Divonne lake, Sunday from 09:30.

You can find more information regarding the Mini Atomiade at the following link: <http://www.asceri.eu/en/mini-atomiade-2016>.

THE CERN ACCELERATOR SCHOOL

Introduction to accelerator physics

This course will take place in Budapest, Hungary, from 2 to 14 October 2016. It is now open for registration and further information can be found at:

<http://cas.web.cern.ch/cas/Hungary2016/Hungary-advert.html> and <http://indico.cern.ch/event/532397/>.

EARLY-CAREER RESEARCHERS IN MEDICAL APPLICATIONS @ CERN | 6 JUNE

Discover how technological advances for high-energy physics have become essential tools for modern medicine.

CERN seeks to answer fundamental questions about the Universe, and this mission naturally contributes to advancing the frontiers of technology. State-of-the-art techniques developed for particle accelerators, detectors,

and physics computing have applications beyond the high-energy physics community in the medical field.

These applications now have an essential role in clinical practices and medical research centres: from imaging devices, accelerator-technology dedicated to cancer therapy, to simulations and data science tools.

This knowledge transfer from the high energy physics community to innovation in other fields is an inherent component of CERN's mission and culture. It fuels scientific collaboration and technological advances, and drives innovation. In addition, it motivates future generations of scientists, and contributes to the public awareness of the impact of fundamental science.

This series of short talks will showcase the diverse medical applications that arise from technology developed at CERN and in high energy physics.

Attendance is open to all without registration.

**Monday 6 June 15.15 p.m. - 18.00 p.m.
Main Auditorium (500-1-001)**

**For more information, please visit:
<https://indico.cern.ch/event/536563/>**

This event is organised by CERN's Knowledge Transfer (KT) Group as well as by the CERN Medical Applications Project Forum (MAPF). Showcased research activities are supported by CERN Medical Applications.

DIVERSITY IN ACTION WORKSHOP | 14 JUNE | BUSINESS CENTER TECHNOPARC

After two years, five successful editions and plenty of positive feedback, we are happy to announce the 7th edition of our Diversity in Action workshop.

Tuesday 14 June 2016

8.30 a.m. - 12.30 p.m.

Crêt Neige (Business Center Technoparc)

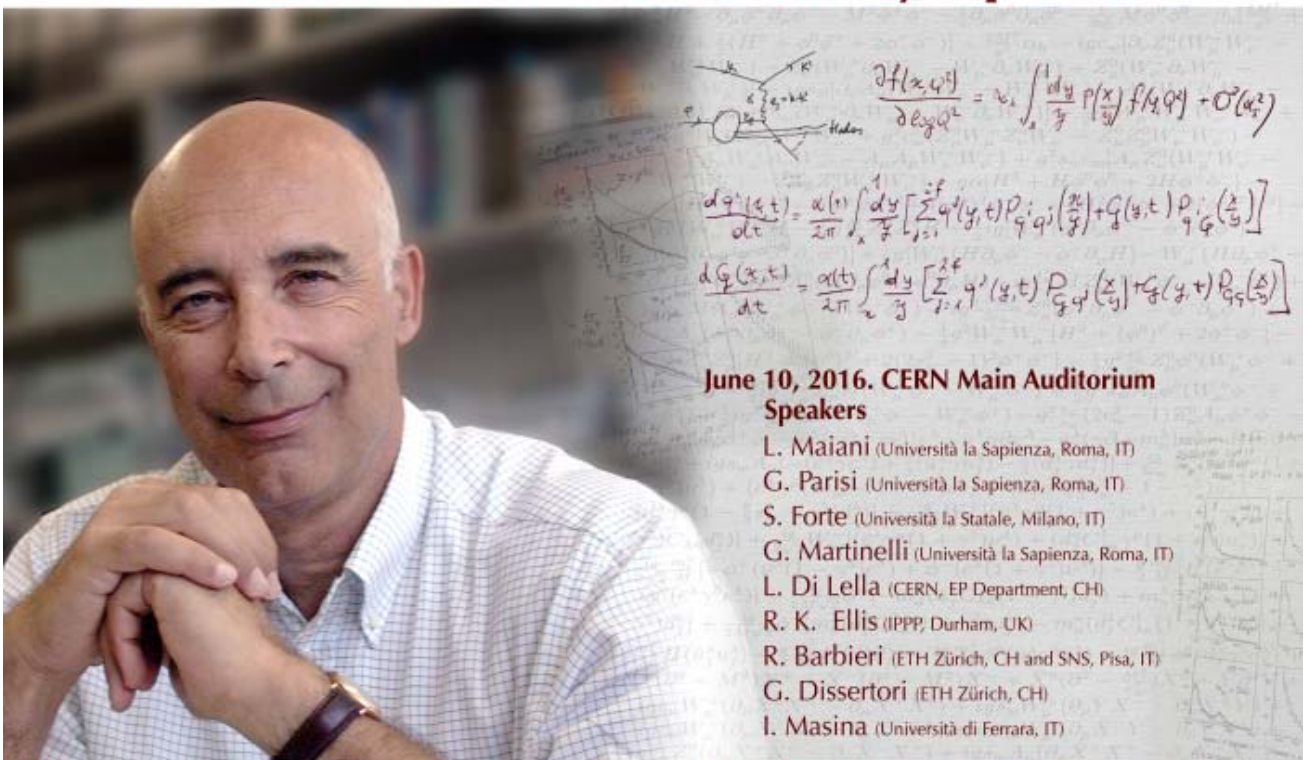
Seize the opportunity and participate in this half-day interactive workshop designed to explore the meaning and importance of diversity at CERN. Using participative multimedia methods and study cases from the CERN work environment, this workshop will provide participants with insights into the different dimensions of diversity, help to develop greater sensitivity to differences, explore ways to recognise and overcome biases and thereby strengthen our tradition of inclusiveness at CERN.

"For me it was a great opportunity to talk about diversity issues with other people at CERN who I would have never met otherwise," says Alex Brown, who participated in the 3rd edition of the workshop. "The discussions I was involved in inspired connections that are still active."

Registration:

<http://cern.ch/diversity/in-action>

Guido Altarelli Memorial Symposium



**June 10, 2016. CERN Main Auditorium
Speakers**

L. Maiani (Università la Sapienza, Roma, IT)
G. Parisi (Università la Sapienza, Roma, IT)
S. Forte (Università la Statale, Milano, IT)
G. Martinelli (Università la Sapienza, Roma, IT)
L. Di Lella (CERN, EP Department, CH)
R. K. Ellis (IPPP, Durham, UK)
R. Barbieri (ETH Zürich, CH and SNS, Pisa, IT)
G. Dissertori (ETH Zürich, CH)
I. Masina (Università di Ferrara, IT)

Link <http://indico.cern.ch/e/AltarelliMemorialSymposium>

Organizers L. Alvarez-Gaume, A. De Rujula, J. Ellis, E. Elsen, S. Ferrara, F. Gianotti, G. Giudice, P. Jenni, M. Mangano, M. Pepe Altarelli, G. Veneziano



Lundi 6 juin 2016, 17h00
Ecole de Physique, Auditoire Stueckelberg

“Science and the Economic Crisis”

Francesco Sylos Labini
Université « La Sapienza », Rome

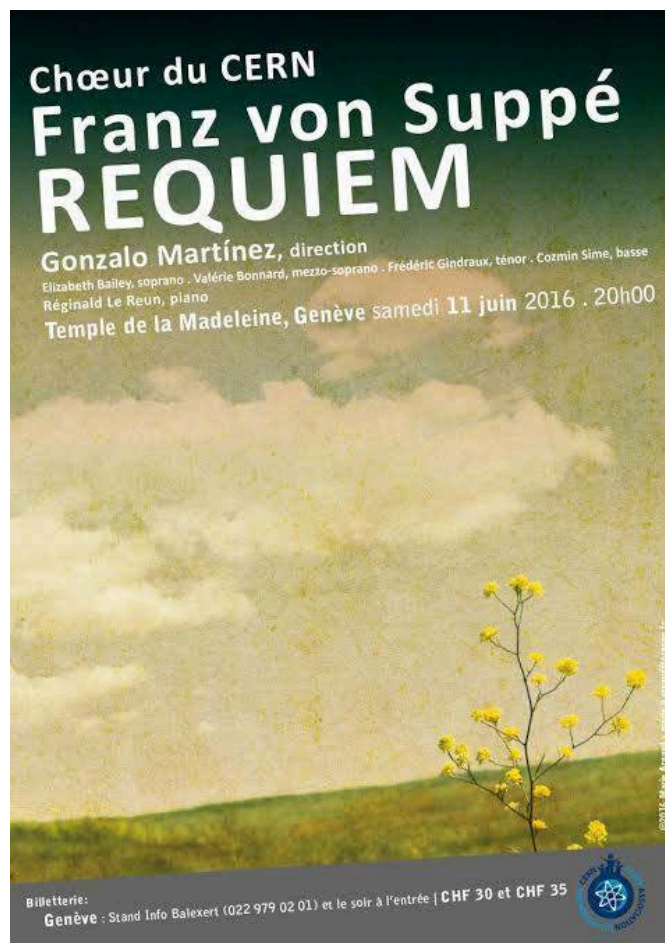
Résumé

The economic crisis is changing the structure of our society, introducing insurmountable inequalities, marginalizing younger energies, stifling scientific research and so inhibiting the possibility to develop the new ideas and innovations that could help to guide us out of the crisis. Science can provide crucial tools that could be instrumental both in comprehending the problems of our time and in outlining perspectives that might constitute a solid and viable alternative to the rampant jungle law—a misconstrued Social Darwinism—that is currently very widespread. In this talk I discuss the interface between science dissemination and scientific policy and show how the ideas developed over the past century in natural sciences actually play a major role in understanding the seemingly diverse and unrelated problems lying at the heart of the current crisis and thus suggesting plausible and original solutions.

Une verrée en compagnie du conférencier sera offerte après le colloque.

Prof. Ruth Durrer

Genève, 23 mai 2016/RD/nc
Secrétariat de la Section de Physique - N. Chaduiron - 022 - 379.63.83



Seminars

MONDAY JUNE 06, 2016

14:00 Workshop Experimental Particle and Astroparticle Seminar Zurich **42-R-407**

TUESDAY JUNE 07, 2016

11:00 LHC Seminar Precision measurements of the CKM angle gamma **Main Auditorium**

WEDNESDAY JUNE 08, 2016

14:15 A&T Seminar In search of the high brightness high current combination: Ideas from electron microscopy/lithography **Council Chamber**
14:30 ISOLDE Seminar Investigating Discrete Symmetry Violations with Rare Isotopes **26-1-022**

THURSDAY JUNE 09, 2016

11:00 Academic Training Lecture Regular Programme Ion Source Physics and Technology (1/2) **13-2-005**

FRIDAY JUNE 10, 2016

11:00 Academic Training Lecture Regular Programme Ion Source Physics and Technology (2/2) **13-2-005**

TUESDAY JUNE 14, 2016

08:45 Safety Délégué à la sécurité territoriale (TSO) - Initial **6959/R-002**
11:00 LHC Seminar ATLAS seminar **Filtration Plant**