



Diversity

Inclusion

Outreach

Activities at the LHC

Dr Tracey Berry, ATLAS collaboration
On behalf of the LHC Experiments



Diversity



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

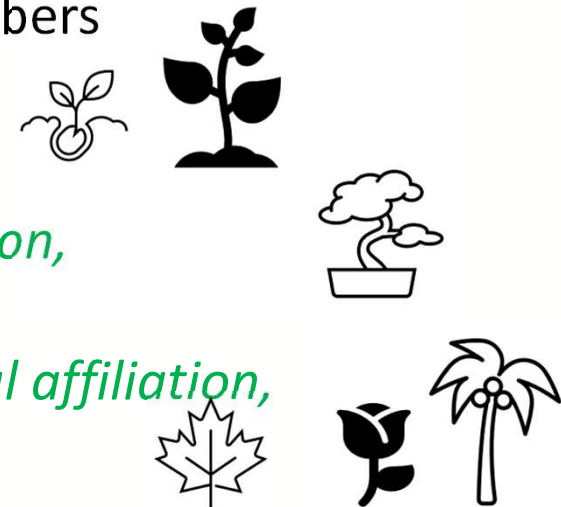
Diversity: the state or quality of being different or varied
the inclusion of people of different races, genders, religions, etc in a group

<https://www.collinsdictionary.com/dictionary/english/diversity>

In collaborations: recognise and accept diverse members

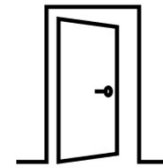
Each individual is unique:

*different age, physical ability or challenges,
gender identity, sexual orientation, family situation,
ethnicity, spiritual or religious beliefs,
career status, employment situation, institutional affiliation,
geographical location, nationality or citizenship*



*In collaborations: want to foster a working environment in experiment
where **all** members of the collaboration are valued and can thrive.*





***Inclusion** refers to an environment in which all members of the collaboration feel **welcome**, have a sense of **belonging** and **value** within the collaboration, and are able to **contribute optimally**.*



To facilitate and promote the respect and adherence of such principles, ALICE/ATLAS/CMS/LHCb Diversity Offices have been established and serve to overlook and administer diversity matters.



Mandate and scope

- **advise** collaboration members and management about diversity
- **promote** diversity initiatives and maintain diversity web pages
- **listen**, actively, to Collaboration member's concerns
- **liaise** with diversity offices at CERN and in other LHC experiments
- **monitor** diversity issues and report periodically to the collaboration

1. Advise



•advise collaboration members and management about diversity matters



- Welcome Talks
- Advise on Codes of Conduct
- Provide Resources
- Inclusive Teamwork Training
- Support members: non gender-binary colleagues, colleagues with visible and invisible disabilities
- Raise awareness and encourage discussions: LHCb ECGD sessions, Women and girls in Science
- EDI Social Events: collaboration week lunches
- Advise Management



Our mandate and scope

- advise collaboration members and management about diversity matters
- promote diversity initiatives and maintain diversity web pages

Useful links

- [CERN Diversity office](#).
- [CERN Ombuds](#).
- [CERN's response](#) channels for inappropriate behavior, misconduct and harassment.
- [CERN's Code of Conduct](#)
- The CERN Diversity and Inclusion Program

<https://alice-collaboration.web.cern.ch/DiversityOffice>



Code of Conduct



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON



- CERN Code of Conduct applies to Everyone
- Collaborations have their own codes of conduct

CMS Code of Conduct

Approved by the CMS Collaboration Board 12-April 2019

The CMS collaboration consists of members with varied national origin, ethnic background, race, gender identity, sexual orientation, gender, age, physical ability, and religion. As a community, we are committed to being positive and inclusive in all regards.

We follow the [CERN Code of Conduct](#). Members of CMS must maintain a professional environment in an atmosphere of tolerance and mutual respect and abstain from all forms of harassment, abuse, intimidation, bullying, and mistreatment of any kind. This includes, but is not limited to, intimidation, sexual or crude jokes or comments, offensive images, and unwelcome physical conduct. Members must keep in mind that behavior and language deemed acceptable to one person may not be to another.

We commit to helping our community adhere to this code of conduct and speak up when we see possible violations of it. We strive to treat those outside of CMS as we would members of our own community. In the event that the letter or the spirit of this code has been violated, appropriate action will be taken, up to and including procedures specified in Annex A3.2 of the CMS Constitution.

<https://cms-docdb.cern.ch/cgi-bin/PublicDocDB//ShowDocument?docid=13847>

Poster version



IT'S EVERYONE'S RESPONSIBILITY TO:



Maintain a professional environment in an atmosphere of tolerance and mutual respect.



Abstain from all forms of harassment, abuse, intimidation, bullying and mistreatment of any kind.



This includes intimidation, sexual or crude jokes or comments, offensive images, and unwelcome physical conduct.



Keep in mind that behaviour and language deemed acceptable to one person may not be to another.



Help our community adhere to the code of conduct and speak up when you see possible violations.

<http://cds.cern.ch/record/2690506/files/Code%20of%20Conduct,%20English.pdf>

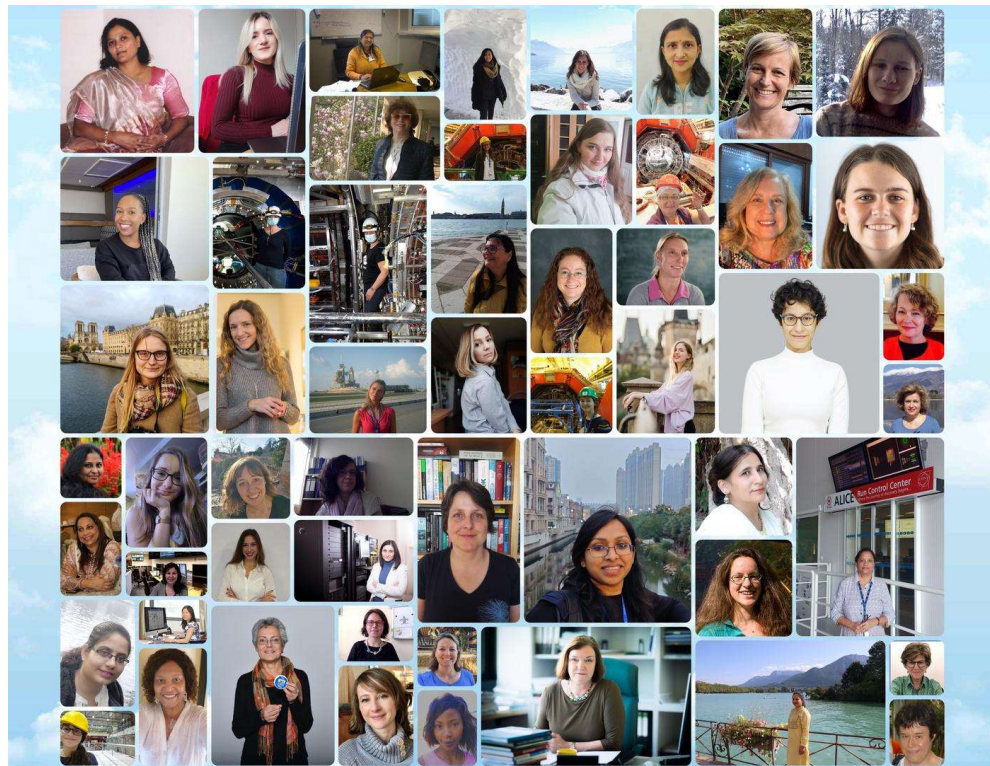
2. Promote



ROYAL HOLLOWAY UNIVERSITY OF LONDON

- promote diversity initiatives and maintain diversity web pages

International Women's Day - 8 March 2021- ALICE



LGBTQ CERN Retweeted

Black In Physics @BlackInPhysics · 14 Oct 2020

Here's a list of all of our sweet sweet #BlackInPhysics week events! First up our summary professional and social events calendars!



LGBTQ CERN @LGBTQCERN · 18 Nov 2021

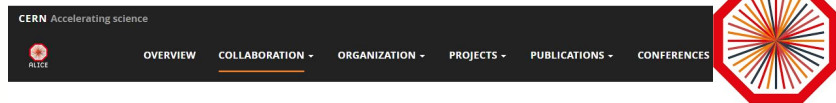
Happy #LGBTQSTEMDay ! Today we are celebrating the contributions of LGBTQ+ people in STEM and reaffirming our commitment to continue breaking down barriers 🏳️‍🌈



2. Promote



•promote diversity initiatives and maintain diversity web pages



Our mandate and scope

- advise collaboration members and management about diversity matters
- promote diversity initiatives and maintain diversity web pages
- monitor diversity issues and report periodically to the collaboration
- liaise with diversity offices at CERN and in other LHC experiments

Useful links

- [CERN Diversity office](#)
- [CERN Ombuds](#)
- [CERN's response](#) channels for inappropriate behavior, misconduct and harassment.
- [CERN's Code of Conduct](#)
- The CERN Diversity and Inclusion Program has released a handbook that serves to assist in adopting a more inclusive approach towards persons with disabilities. It can be found [here](#).
- For the ALICE rainbow logo, click [here](#).

Events:

- [International Women's Day - 8 March 2021](#)
- [International Day of Women and Girls in Science, 11 February](#)
- [YouTube Video 11 Feb 2021](#)

Contact

You can send us an email that will be treated confidentially by using the email address alice-diversity-office@cern.ch or send us an anonymous message by using this [form](#).

<https://alice-collaboration.web.cern.ch/DiversityOffice>



LHCb Early Career, Gender and Diversity Office

LHCb homepage > ECGD homepage

News & upcoming events

- April 25-26 2022**
The two-day **BISS-HEP AGC Tools 2022 Workshop** is an opportunity for early career scientists. The event is dedicated to providing tools and workflows related to the "Analysis Grand Challenge" (AGC) organized by BISS-HEP and partners. The deadline for registrations is April 22nd 2022, and the workshop will be fully virtual. Registration may be done via the web page.
- April 28-30 2022**
Django Girls, the programming workshop for girls and women aged 15 and over, is returning to CERN on 28 and 30 April 2022 in an online edition on zoom. With coaching by CERN tutors, the participants will learn how to create a blog and launch it online. The organizers are looking for volunteer coaches to lead the workshop, where each volunteer will coach a team of three participants. More info and registration by 21 March via this web page.

Older news

ECGD newsletter

Latest newsletter

All 2022 newsletters
All 2021 newsletters
Older newsletters (2019-2020)

What are we here for?

To quote from the LHCb constitution,
"The Early Career, Gender and Diversity (ECGD) office oversees the well-being and working environment of all LHCb members."

We are here for all issues related to gender and diversity and to the needs of our colleagues at an early career stage. In particular, we deal with issues related to any type of indirect or direct discrimination, be it on grounds of gender, sexual orientation, ethnicity, disability, creed, cultural background or other factors. Please contact us if you have experienced or witnessed any type of discrimination or harassment or any inappropriate behaviour in conflict with the LHCb Code of Conduct. We guarantee absolute confidentiality.

We organize plenary meetings at every LHCb collaboration week and we advertise news and activities related to ECGD issues through this web page and through emails to the collaboration. Please help us help you by letting us know of your concerns and by pointing us to relevant news, events and resources.

Who are we?

The ECGD office is composed of two senior ECGD officers, Irina Ivazeva and Eli Ben-Haim and two early career representatives, Sara Celan and Martha Hilton.

ECGD officers

The two ECGD officers are appointed for a two-year term by the LHCb management and endorsed by the Collaboration Board. ECGD officers are usually "senior" members of the collaboration, with long-term work contracts, to make sure we can act independently and are not easily intimidated.



Contact

For general messages:
You can reach the ECGD office by email to lhcbecgd@cern.ch.

For all confidential matters:
Please write to the senior ECGD officers' personal emails.

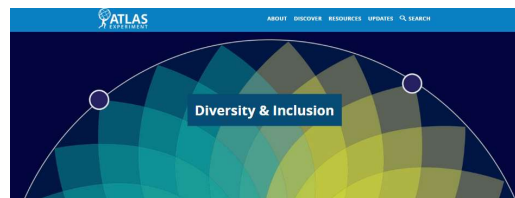
COVID-19

Please join our mattemoost channel to share advice, news and help - or just to stay in touch with your colleagues in these crazy times.

Links

- ECGD:**
 - Discrimination, harassment
 - LHC meeting programme
 - ECGD meetings
 - ECGD presentations
- LHCb and beyond:**
 - StarterKit initiative
 - Hope on (Early) Career
 - Laura Bassi initiative
 - More on Gender & Diversity

https://lhcb.web.cern.ch/ECGD_Office/ECGD-intro.html



The ATLAS Collaboration



The ATLAS Collaboration draws its creativity and strength from world-wide members with different backgrounds. This pluralism is an essential part of our identity as scientists and we fully uphold CERN's principles of inclusiveness and diversity as enshrined in the [CERN Code of Conduct](#).

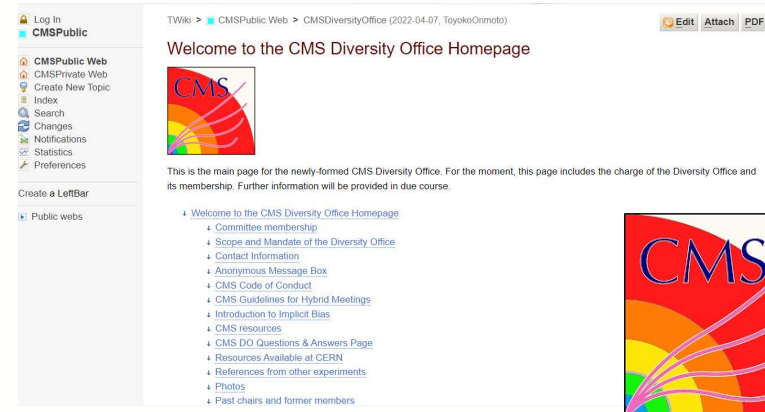
An establishment of over 600 scientists, students, engineers, technicians, and administrative staff, ATLAS is made up of diverse members from around the globe with different age, gender, identity, sexual orientation, culture, physical ability, race and ethnicity, academic, non-academic, religious, or linguistic backgrounds. We expect high standards of professional conduct and commitment to equality, diversity and inclusion in our community.

We value the opinions of people with different experiences and backgrounds. A diverse group brings different perspectives and enhances our ability to tackle complex problems. We expect colleagues to refrain from all types of bullying and harassment, including any form of abuse or vexatious jokes at all times (e.g. text, social in person and in virtual environments).

We recognise that discrimination exists in many respects of equality, including science. Race/ethnicity is a consideration in all of the forms. We acknowledge that there must be done to address this. To be part of the solution, we continue to strive to identify and remove barriers that obstruct people from being able to work free from harassment, and to quality address issues that may prevent everyone in the Collaboration from having equality of opportunity.

We must ensure that our colleagues have the tools and resources they need to succeed. Preventing and being responsible can be challenging. Traditionally having a higher respect system, and we must ensure that support is in place. We must also take particular care to address the needs expressed by collaborators with various physical differences, such as vision, hearing or other impairments.

<https://atlas.cern/diversity>



Welcome to the CMS Diversity Office Homepage

This is the main page for the newly-formed CMS Diversity Office. For the moment, this page includes the charge of the Diversity Office and its membership. Further information will be provided in due course.

- Welcome to the CMS Diversity Office Homepage
 - Committee membership
 - Scope and Mandate of the Diversity Office
 - Contact Information
 - Anonymous Message Box
 - CMS Code of Conduct
 - CMS Guidelines for Hybrid Meetings
 - Introduction to Implicit Bias
 - CMS resources
 - CMS DO Questions & Answers Page
 - Resources Available at CERN
 - References from other experiments
 - Photos
 - Past chairs and former members

<https://twiki.cern.ch/twiki/bin/view/CMSPublic/CMSDiversityOffice>

3. Listen



•listen, actively, to Collaboration member’s concerns

All collaborations have contact emails and anonymous message boxes.

Contact

You can send us an email that will be treated confidentially by using the email address alice-diversity-office@cern.ch or send us an anonymous message by using this [form](#).



Generic email: lhcb.ecgd@cern.ch.

For confidential matters: write to the senior ECGD officers' personal emails.



Mattermost channel to share advice, news and help - or just to stay in touch

https://lhcb.web.cern.ch/ECGD_Office/officers.html

Contacts for ATLAS members

- Mailing list: atlas-diversity-inclusion-contacts@cern.ch (not anonymous, not archived):
- Fully anonymous message box on [twiki page](#)
- Can contact individuals to ask for a private discussion
- Mailing list for general discussion: atlas-diversity-inclusion-forum@cern.ch (not archived)



Contact Information

- Diversity Office Indico: <https://indico.cern.ch/category/9912/>
- Email the Diversity Office co-chairs: cms-diversity-office-chair@cern.ch
- Email all members of the Diversity Office: cms-diversity-office@cern.ch
- Mattermost: <https://mattermost.web.cern.ch/cms-exp/channels/cms-diversity-office>



Anonymous Message Box

Use [this form](#) to communicate confidentially with the CMS Diversity Office Co-Chairs.

4. Liaise



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

- **liaise** with diversity offices at CERN and in other LHC experiments



ALICE

Regular
D&I
meetings



CERN Diversity Roundtable – participation from all 4 experiments
smaller LHC experiments
LGBTQ+ CERN and Disability networks

CERN Diversity and Inclusion Programme



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

The strategy in a nutshell

OUR VISION
scientific excellence through diversity and inclusion

OUR GOAL
to increase the nationality and gender diversity of Staff & Fellows (MPE) population by 2025

25 by '25
Accelerating diversity at CERN

"We commit to placing the principles of equality, diversity & inclusion at the heart of all the physics community's activities."
- ESPP 2020 update

The STRATEGY

GENDER target (aspirational)

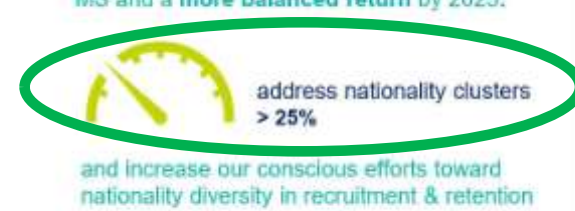
GOAL:
With a particular focus on **women in STEM:**



- ✓ **Leadership-led**
- ✓ **Leverage existing progress:** gender balance increased in Senior Management
- ✓ **25% as an average** across MPE population (not per Department)
- ✓ **Diversity & inclusion** in recruitment (and talent pipelines), promotion, training, communications
- ✓ **Sustainable actions** toward long-term gender parity

NATIONALITY indicator (not a cap, not a quota)

GOAL:
With a particular focus on under-represented MS and a **more balanced return** by 2025:







5. Monitor



- **monitor** diversity issues and report periodically to the collaboration



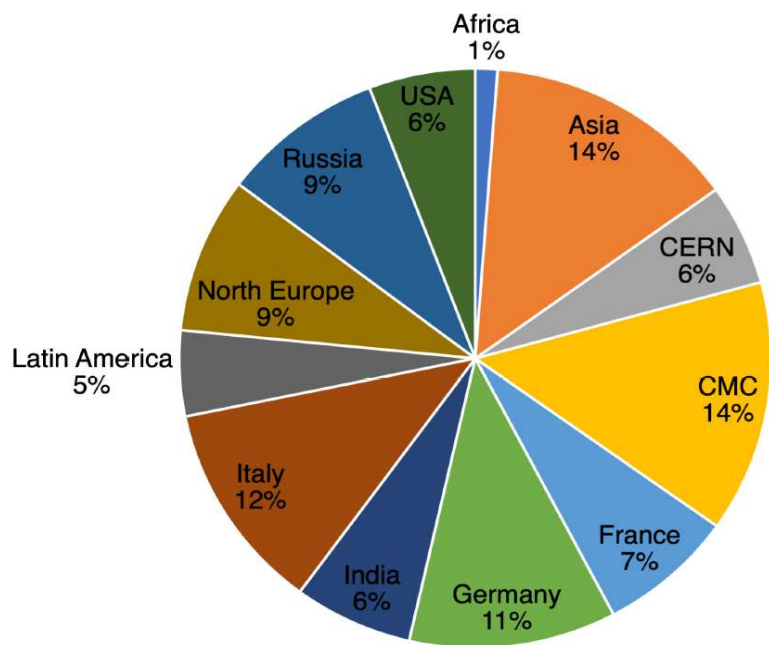
Experiment	 ALICE			
Countries Involved	39	40	54	19
Institutions Involved	172	180	242	88
Number of Collaborators	1968	5900	5416	1482
Gender Ratio	~21 %	~21%	~20%	~19%

Some Representative Figures - ALICE

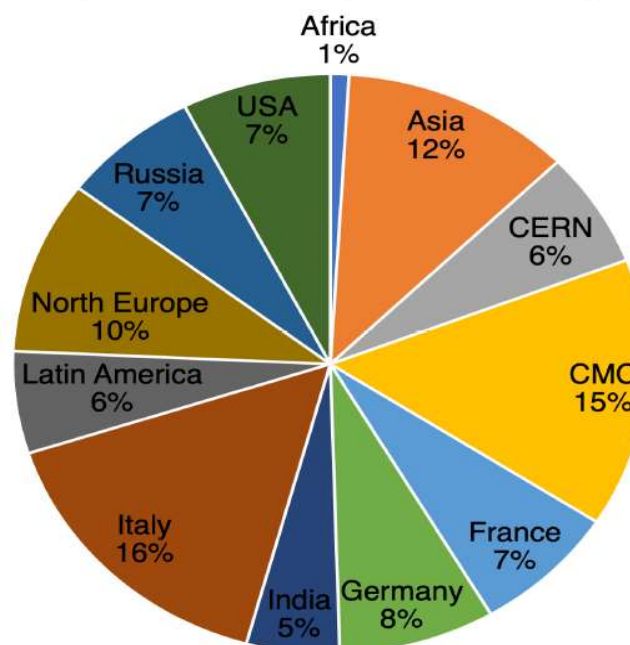


ROYAL HOLLOWAY
UNIVERSITY
OF LONDON

ALICE Members by region with responsibility roles by region



Diverse geographical distribution



Responsibility roles ~reflect population

Provided by the ALICE Collaboration

13

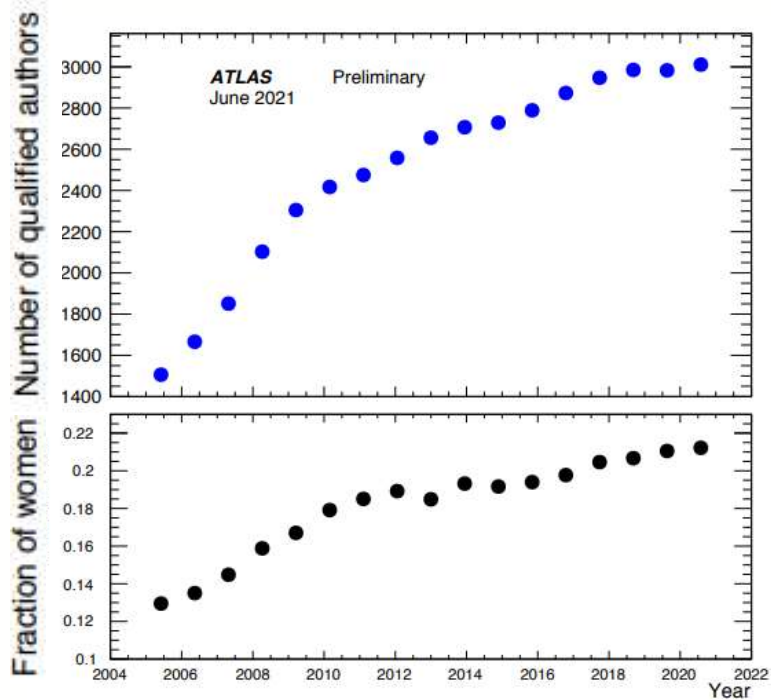
01/09/2021 snapshot.

Talk by E. Ben-Haim on LHCb, Alice and the "tiny" LHC collaborations e.g., FASER, LHCf

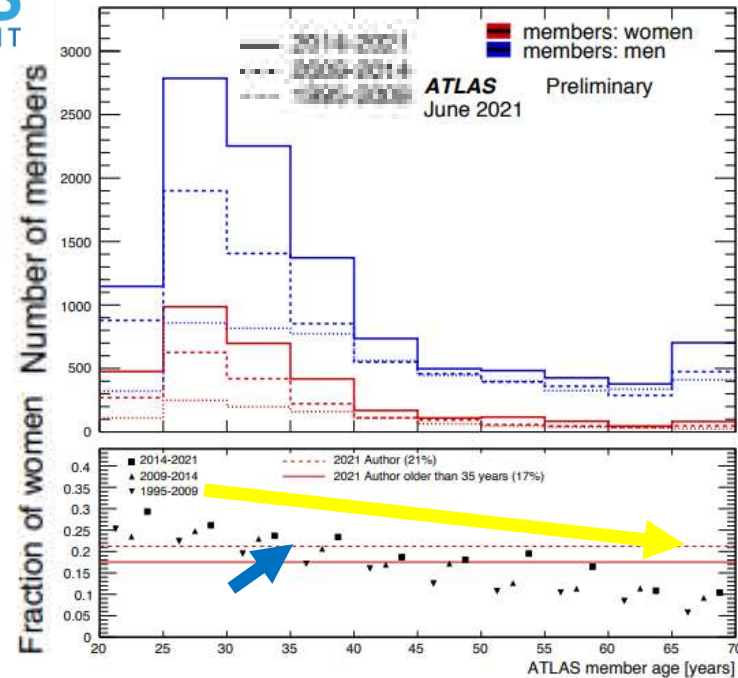
Some Representative Figures - ATLAS



ROYAL HOLLOWAY UNIVERSITY OF LONDON



Fraction of women increased from ~13% to ~21-22% in 16 years.

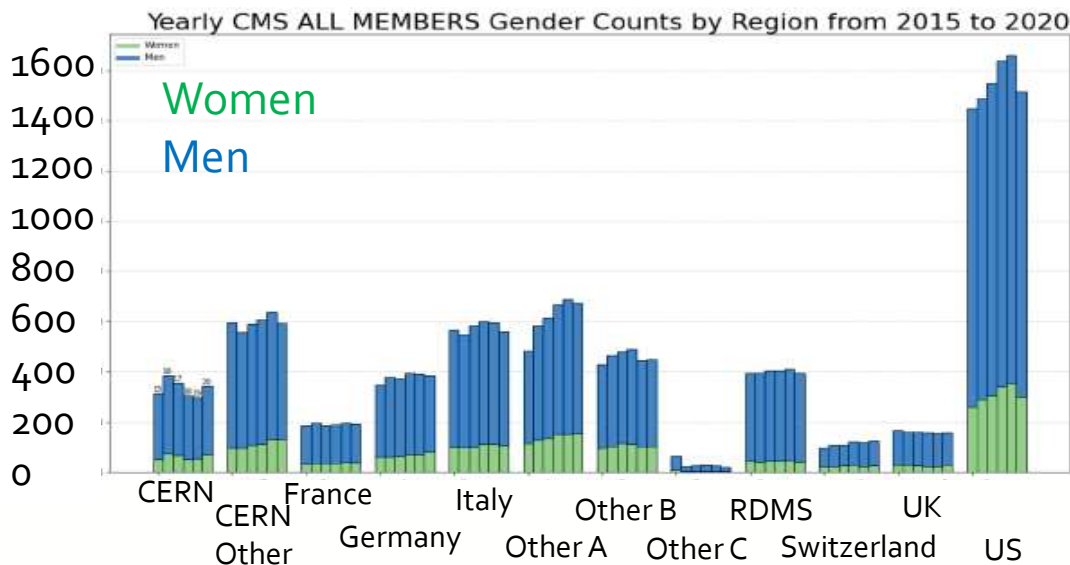


As age advances fraction of women decreases especially at tenure level. But over last 20 yrs, fraction of women has increased at all ages.

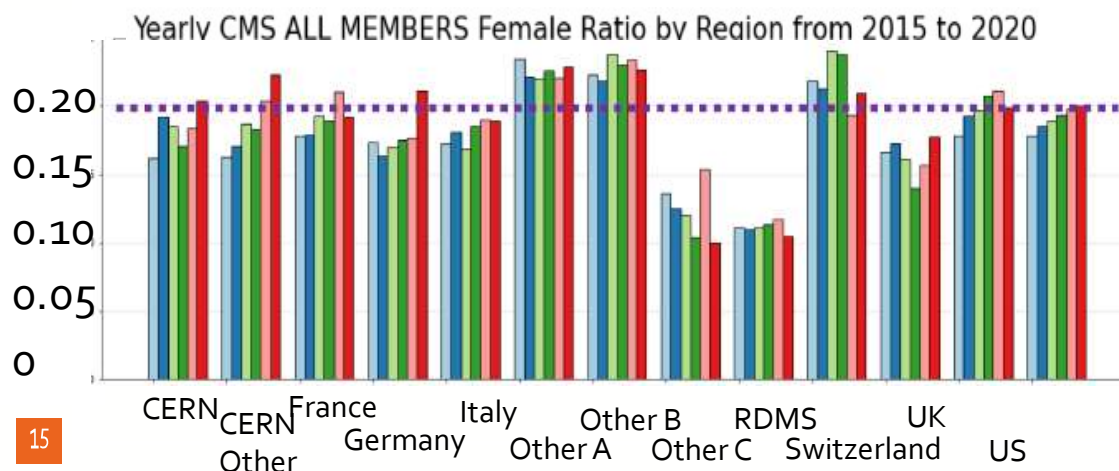
Some Representative Figures - CMS



Trends in CMS membership by region, and gender



Other CERN members: Austria, Belgium, Bulgaria, Finland, Greece, Hungary, Poland, Portugal, Serbia, Spain
Other States A: China, India, Iran, Korea, Malaysia, New Zealand, Pakistan, Sri Lanka, Taiwan, Thailand
Other States B: Bahrain, Brazil, Colombia, Croatia, Cyprus, Ecuador, Egypt, Estonia, Ireland, Kuwait, Lebanon, Lithuania, Mexico, Montenegro, Oman, Qatar, Saudi Arabia, Turkey, Ukraine



Generally increasing numbers and fraction of women in most regions over 5 years

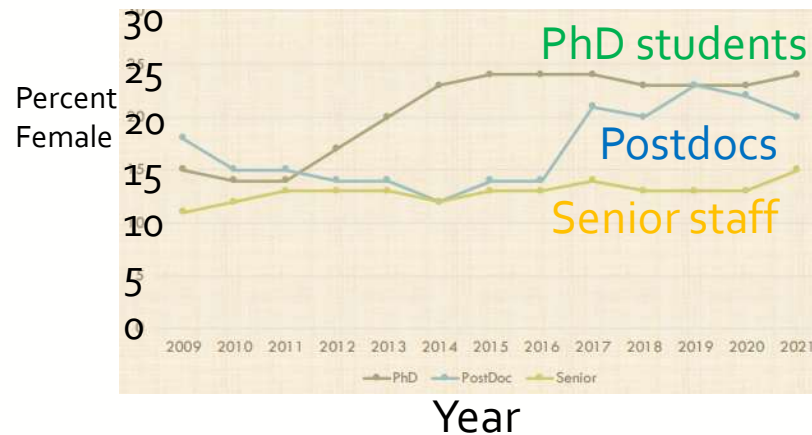
Some Representative Figures - LHCb



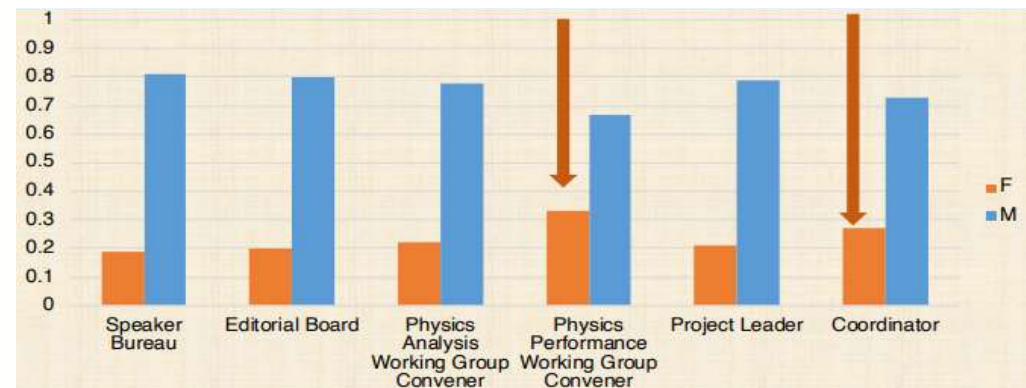
ROYAL HOLLOWAY UNIVERSITY OF LONDON



Percentage Women



Fraction of Women in Role



Over 12 years: number of female **PhD students** increased from ~15% to ~25%, **Postdocs** numbers are also increasing, **Senior staff** increased by ~5% to ~15%

Overall well balanced distribution, but ~30% women as Physics Conveners and Coordinators.

For more information, see: "Outreach, Diversity and Education" session: "Diversity monitoring at the LHC and small experiments".



Outreach

is an effort to bring services and/or information to people wherever they live or spend time

Part of the definition taken from Cambridge Dictionary.

Outreach



Welcome to CERN:

- Guided/School Tours
- A new ATLAS Visitor Centre [P]
- LHCb Exhibition Factory



GUIDED TOURS



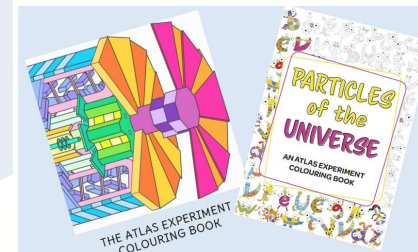
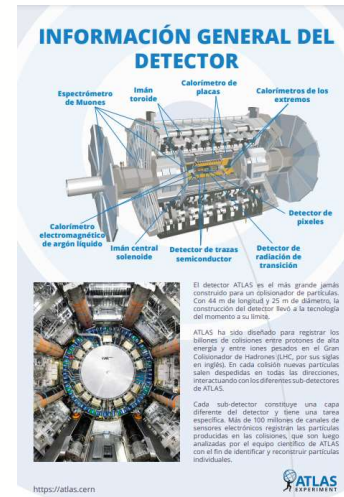
Virtually bring CERN to others:

- Virtual Visits:
ATLAS: Bringing the world to our detector [P]
LHCb: English and German open visits 2021 [T]
- International MasterClasses



Providing Materials:

- ATLAS Open Data: developing education and outreach resources from research data [P]
- Multi-lingual Educational Printables: from colouring books, activity sheets, cheat & fact sheets [P]
- Lego Models



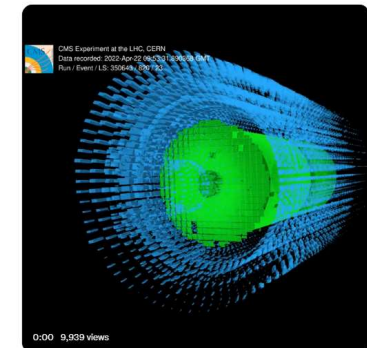
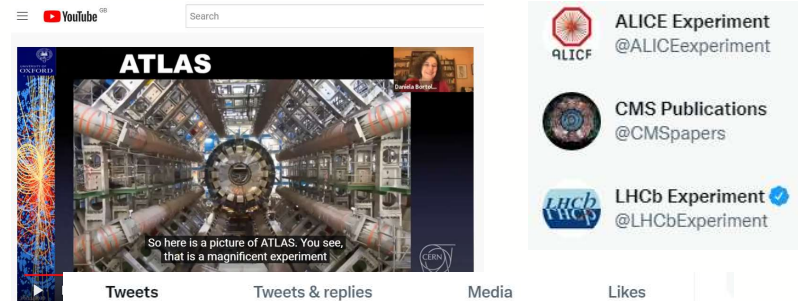
The 16 000-bricks LEGO model of ALICE, designed and built during a dedicated workshop by German institutes of ALICE.

Outreach



Sharing Information:

- YouTube video about physics results
- Social Media – FB, Twitter, Instagram
- Increasing Multi-lingualism in ATLAS' Science Communication [P]
- Sharing ATLAS Science: public communication [P]
- Links between Art and Science



ALICE participated in the Cosmonaut art-meets-science exhibition. Museum in Seoul

Calendar of Events



ROYAL HOLLOWAY UNIVERSITY OF LONDON

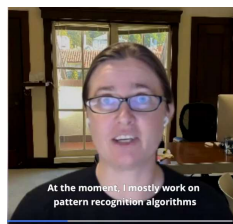
- ❑ International Day of Women and Girls in Science (11 Feb)
- ❑ International Women’s Day (8 March)
- ❑ LGBTQ+STEM Day (18 November)
- ❑ Holiday Card, etc (December)



ALICE Experiment @ALICEexperiment
Today for @LGBTSTEMDay #LGBTSTEMDay we join friends around the world to celebrate the presence and important contributions of LGBTQ+ people across all STEM disciplines!



<https://www.facebook.com/watch/?v=193951902523441>



<https://www.facebook.com/235921729778597/videos/444321796813005>



<https://atlas.cern/updates/blog/gingerbread-wonderland>

Conclusion



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

Diversity – is important to pursue excellent science
diverse teams are more likely to solve problems and be innovative

Inclusion – is vital to make the most of our collaborations' diverse membership

Outreach – is imperative to communicate our work to a wider audience
to explain what we are achieving and how and
to interest and inspire future generations, to create a sustainable future

25 by 25 - we are working towards CERN's aims of 25 % females by 2025 and
to continue to create nationally diverse leadership teams



Diversity-Inclusion

alice-diversity-office@cern.ch

atlas-diversity-inclusion-contacts@cern.ch

cms-diversity-office@cern.ch

lhcb.ecgd@cern.ch

Outreach

ALICE-outreach@cern.ch

atlas-outreach@cern.ch

cms-outreach@cern.ch

lhcb-outreach@cern.ch



danke

多謝

感謝

bedankt

obrigado

ありがとうございました

Thank you

gracias

dyakuyu

xie xie 謝謝

grazie

takk

merci

Arigatou gozaimasu



Teşekkürler

The 10th Annual Large Hadron Collider Physics Conference May 16-21, 2022



धन्यवाद

谢谢

