

LHCP 2024

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# Diversity & Inclusion Initiatives by the Experiments

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# In the beginning...

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Third session of the CERN Provisional Council, October 4, 1952, in Amsterdam.



Groundbreaking at current CERN site in Meyrin, Switzerland, 1954.

# Trans-European / International Diversity

## CERN

European Organization for Nuclear Research

Founding member states of CERN in 1954

Current member states of CERN



### Sept 1954 (12 countries)

Belgium, Denmark, France, the Federal Republic of Germany, Greece, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and Yugoslavia

### Today (23 countries)

Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Israel, Italy, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Spain, Sweden, Switzerland and United Kingdom.

### **Associates in pre-stage to Membership:**

Cyprus, Estonia, Slovenia

### **Associate Members:**

Brazil, Croatia, India, Latvia, Lithuania, Pakistan, Türkiye and Ukraine

### **Observers:**

Japan, USA, EU, UNESCO

# International Diversity of the LHC

## Example of ATLAS Collaboration

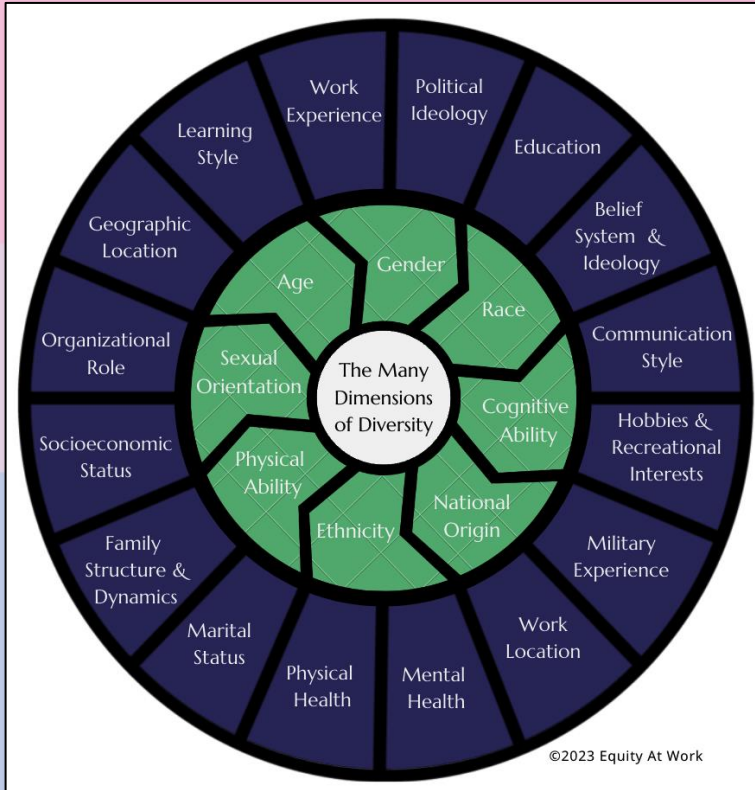


185 Institutions (253 institutes) from 42 countries (2022)

Over 5900 members of 103 nationalities (2022)



# But there are many more dimensions...



## Diversity

The presence of differences within a given setting. In the workplace, that can mean differences in race, ethnicity, gender, gender identity, sexual orientation, age and socioeconomic class. It can also refer to differences in physical ability, veteran status, whether or not you have kids, etc.

## Equity

The process of ensuring that practices and programs are impartial, fair and provide equal possible outcomes for every individual.

## Inclusion

The practice of ensuring that people feel a sense of belonging in the workplace. This means that every employee feels comfortable and supported by the organization when it comes to being their authentic selves.

# Why is this important for our field?

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## Fairness

- We are publicly funded; all who want to participate ought to have the opportunity

## Need

- Science benefits from input based on a variety of viewpoints

## Practicality

- You don't make stringent cuts when looking for rare processes

“The diversity of the scientific community helps facilitate specialization and provides different points of view that lead to diverse investigations, invigorate problem solving, and balance biases.”

*U.C. Berkeley Study*

“Diversity is an asset of humanity, it's our richness, and we have to use it in the best possible way.”

*Dr. Fabiola Gianotti*

“Without deviation from the norm, progress is not possible.”

*Frank Zappa*



# Initiatives of the LHC Experiments





# LHCb





# LHCb

## Early Career, Gender and Diversity Office (ECGD)

- ECGD Officers: 2-year terms, senior(ish)
  - Run the office
  - Deal with confidential matters
- EC Representatives: elected by EC community
  - Listen to and report needs of EC community
  - Meet with EC reps from other experiments
  - One Rep sits in on CB meetings

## ECGD Meetings

- Plenary talk at every LHCb Week, topics:
  - Mentoring, Paternity/maternity leave, Career options outside HEP, Career paths inside HEP, Sexual harassment, Women in STEM, Representation of “young” people in the collaboration, Working from home during a pandemic, Mailing lists, Accessibility & support for colleagues with physical disabilities, Geographical representation of responsibilities, Work/Life balance, Mental health, Climate, ...



Will Barter



Sneha Malde



Guillaume  
Pietrzyk



Lorenzo  
Paolucci

# LHCb

## Participation in CERN-wide activities

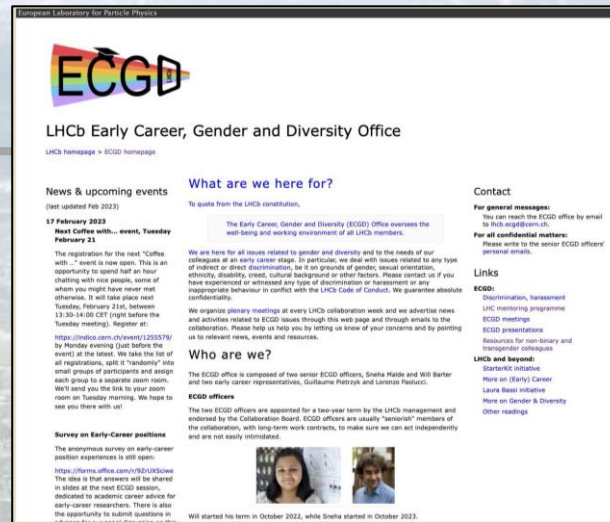
- Soft skills workshop
- Mentoring@CERN (now integrated with WIT)
- LHC career events

## Liaising with other collaborations...

- For example, through the CERN D&I Roundtable

## The Laura Bassi Initiative

- The Laura Bassi initiative was set-up in 2019 to bring together LHCb colleagues interested in tackling the underrepresentation of women in HEP, to promote discussion and ideas on related issues and to provide an informal network to colleagues. While the group is aimed primarily at junior women and under-represented genders it is open to anyone interested in tackling issues of underrepresentation in HEP. Meetings are held during collaboration weeks. While the Laura Bassi initiative is independent of the LHCb ECGD office, with a focus on junior-led initiatives, the two groups often discuss similar topics.



The screenshot shows the website for the LHCb Early Career, Gender and Diversity Office. At the top is the ECGD logo. Below it is the office name and a breadcrumb trail: 'LHCb homepage > ECGD homepage'. The page is divided into several sections: 'News & upcoming events' with a sub-section 'Next Coffee with...' for a Tuesday event on February 21; 'What are we here for?' which describes the office's mission to support all LHCb members and lists resources like mentoring programs and ECGD meetings; 'Who are we?' which identifies the two ECGD officers, Sneha Maile and Will Barter; and 'Contact' information. There are also 'Links' to various resources and a 'Survey on Early-Career positions' section.



# CMS





# CMS

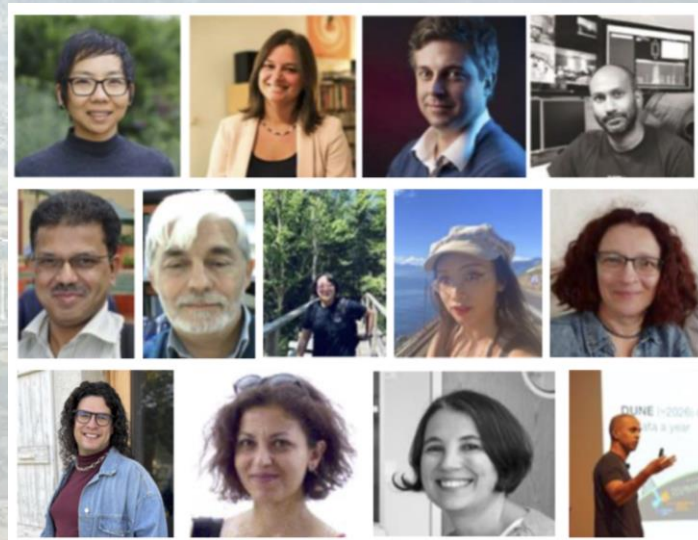
## CMS Diversity & Inclusion Office

Founded in 2017 with the goal of fostering a working environment where all members of the Collaboration can thrive and bring in their talents

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

### Mandate

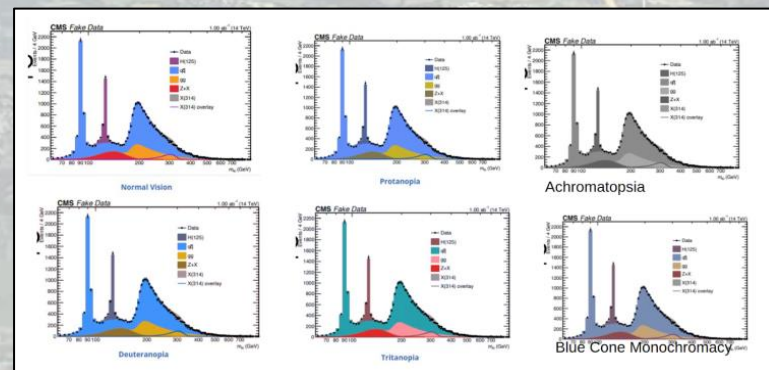
- advise management and individuals on diversity related matters
- propose actions to promote diversity and create awareness
- monitor and record statistical information related to diversity
- actively listen to Collaboration members' concerns
- report regularly to the Collaboration about status and progress of diversity-related issues
- collaborate with relevant bodies outside CMS such as the CERN Diversity & Inclusion Program



# CMS

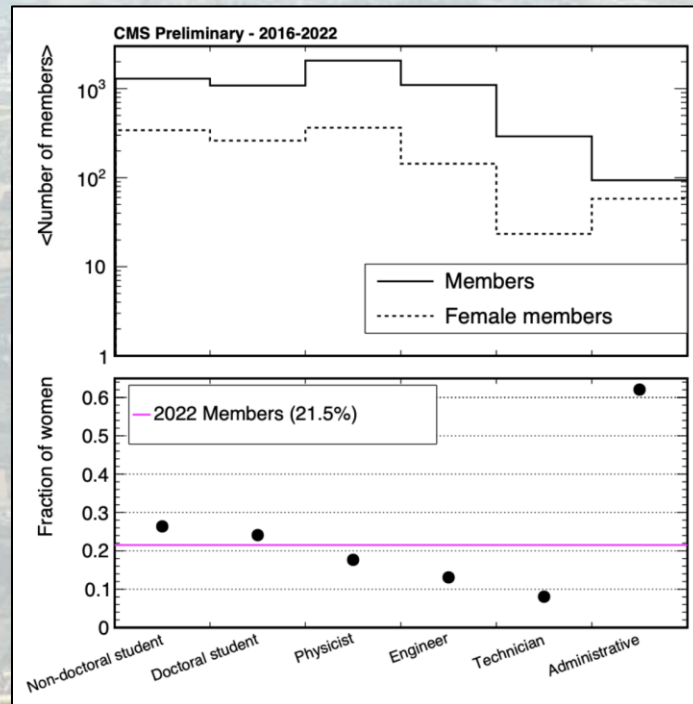
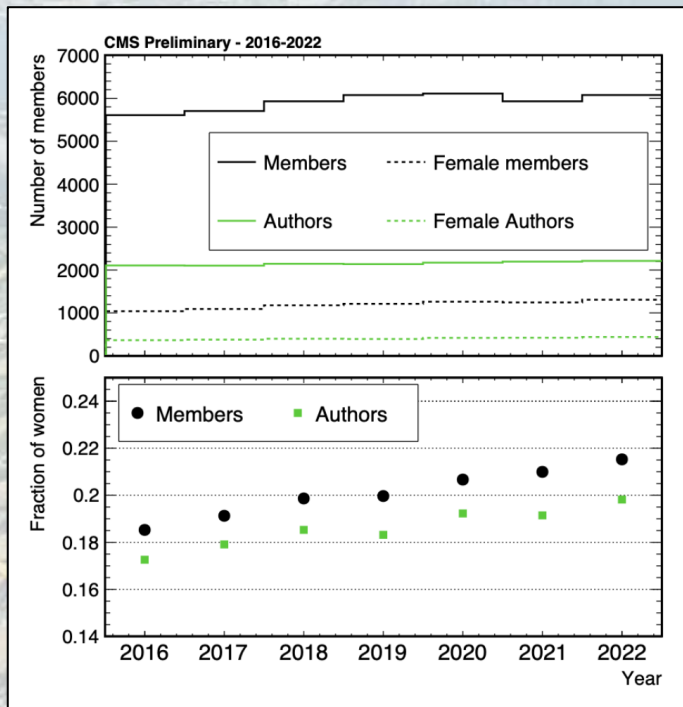
## Activities

- Collaborate with Outreach & Communication group to give ideas and create content for people inside and outside the collaboration
- Participation in
  - LGBTQ+ STEAM Day (18th November 2022)
  - International Day of Women and Girls in Science (11th February 2023)
  - <https://cylindricalonion.web.cern.ch/blogs/cms-women-science>
- CMS Handbook
  - <https://heyzine.com/flip-book/00f6546b1c.html>
- CMS Colour Palettes (for CVD)
  - <https://cms.cern/news/cms-collaboration-sets-standard-inclusivity-colour-vision-deficiency-friendly-palettes>





## Statistics for Binary (Passport) Gender





# ALICE



# ALICE

## ALICE DEI Office

- Promote diversity initiatives
- Advise ALICE team members & management
- Monitor diversity issues, collect and analyze data
- Liaise with DEI offices at CERN and other LHC experiments
- Promote well-being initiatives (New!)

## Role in Collaboration

- ALICE Juniors representatives have a vote in the collaboration board
- Encouraged training for management roles to promote inclusivity at ALICE (offered yearly), funded by ALICE



Valentina  
Zaccolo



Sami Räsänen



Ananya Rai

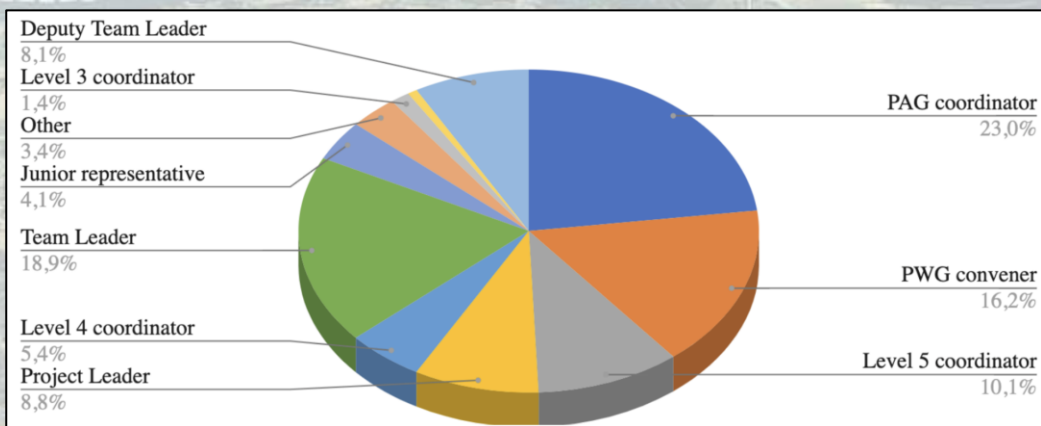
See plenary talk!



# ALICE

## Inclusive Workspaces Workshops

- Enhance self-awareness & develop strategies to overcome personal biases
- Foster a comfortable environment for idea sharing
- Provide skills to handle instances of harassment & inappropriate behavior
- Promote comprehension of relationships and effective cross-cultural communication



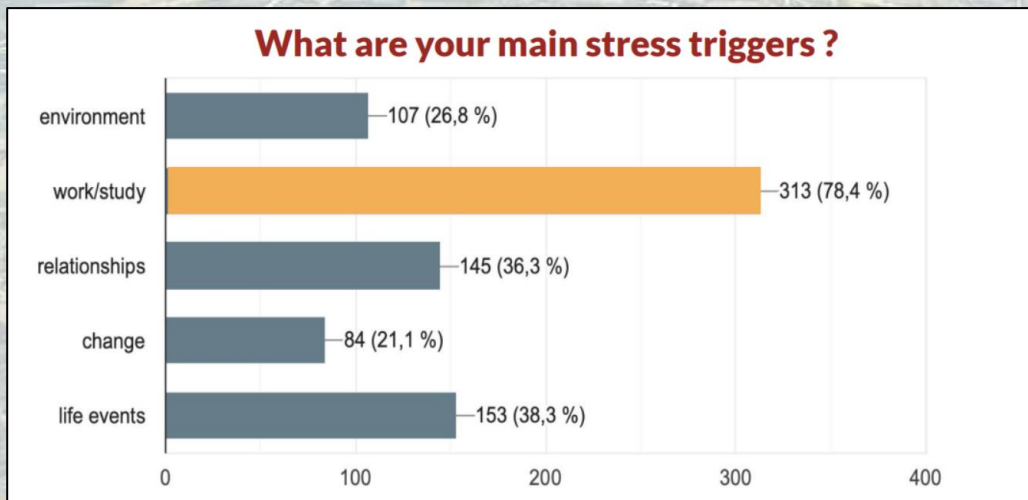
Percentage of participation in workshop by ALICE leadership



# ALICE

## CERN-wide well-being survey led by ALICE Juniors

- Shown at LHCP 2023
- 2023 Survey motivated DEI office to employ well-being initiatives



Example results from the CERN-wide survey

# ATLAS





# ATLAS

## ATLAS D&I Contacts

- Appointed by CB Chair to 2-year overlapping terms
- Advise on Codes of Conduct
- Promote D&I and provide resources related to D&I
- Evaluate and propose training courses
- Act as contact for ATLAS members to discuss concerns related to D&I
- Liaison with other diversity contacts in HEP / CERN
- Compile / present a regular report on the composition of the collaboration
- Organise collaboration week discussions



Maria Teresa  
Dova



Steven Goldfarb



Flavia De Almeida  
Dias



Simon Connell

# ATLAS

## Attending to Collaboration Concerns

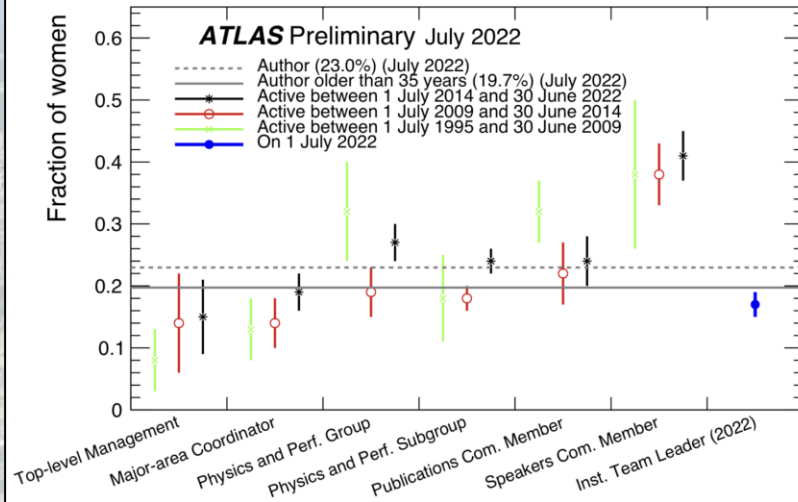
- Non-anonymous contact via members or list
  - Follow-up, but all communications kept private
  - Action can be recommended, but not taken unless requested
- Anonymous contact via message box
  - Communicated with Management, CB Chair, as needed
  - Follow-up if requested and appropriate
  - Records maintained for future reference
- Discussion Sessions during Collaboration Weeks
  - Summary of DEI activities and how to make contact
  - Presentation from ATLAS institute on their programmes
  - Typically hashing out a hot topic





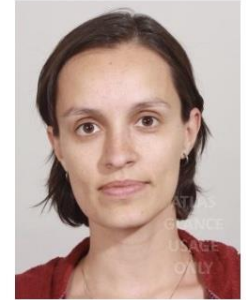
# ATLAS Progress

## Fraction of Women\* in Leadership Roles



- **Top level management:** spokesperson, 2 deputies; technical, resource, upgrade coordinator; 2y term
- **Major area coordinators:** ~16; 2y term
- **Physics & performance group:** 18 group leaders, 2 per group; 2y term
- **Physics & performance subgroup:** ~2 conveners per subgroup; ~2y term
- **Publications Committee:** 12 members, 2y term
- **Speakers Committee:** 15 members, 3y term.
- **Institution Team Leader:** 182 ATLAS member institutions Chosen by institutions

Statistics for Binary (Passport) Gender



Preferred Pronouns

Flavia De Almeida Dias  
(she/her)

flavia.dias@cern.ch

Physicist

Nikhef

FOM - Institute SAF Nikhef and University of Amsterdam/Nikhef

Contact on Diversity and Inclusion

Derivation Production Manager

Active Author

Counted for M&O

Counted for Operation Tasks

# CERN D&I Programme

## Started in 2012, Recently a Programme

- Louise Carvalho (Leader, Legal Adviser HR)
- Melania Coletta (D&I Adviser)

## Sample of Initiatives and Activities

- Host D&I Roundtable
- 25 by '25 initiative
  - Increase Nationality & Gender diversity by 2025
  - Training Programmes for Personnel
- Invisible Dimensions Poll
- LGBTQ+ in STEM Day
- Neurodiversity (NSAC)

## Inclusion: language & learning

Science Gateway: training for guides on inclusivity

Inclusive language: admin eguide

Inclusive language workshop

New Workshop: unconscious bias (full)

Theatre Forum: countering sexism at work



# CERN D&I Programme / 25 by '25 Progress

**GENDER target**  
(aspirational)

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

from 21% in 2020 → 25% in 2025

**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

**NATIONALITY indicator**  
(not a cap, not a quota)

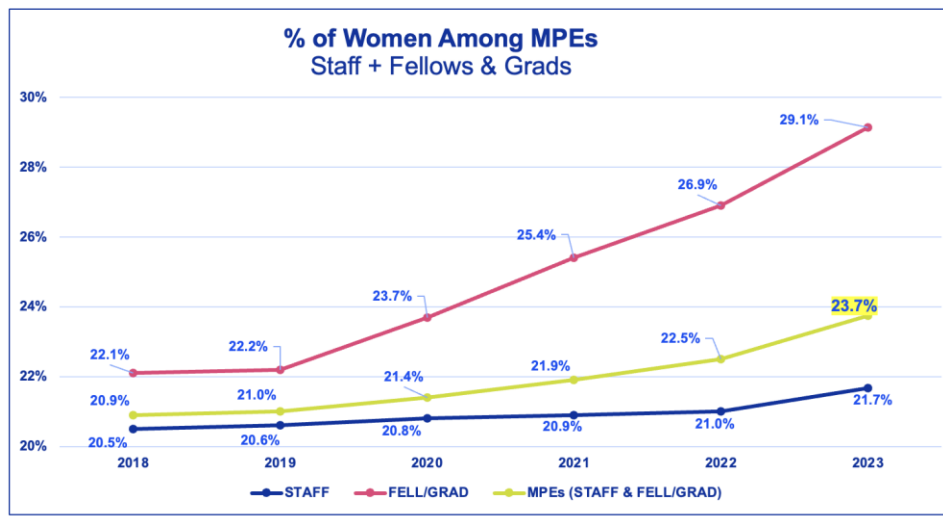
**GOAL**  
With a particular focus on under-represented MS and a more balanced return by 2025:

address nationality clusters > 25%

and increase our conscious efforts toward

## 25 by '25 Periodic Update: Gender

- 2020**
  - Strategy Paper submitted to Director-General
- 2021**
  - Enlarged Directorate endorses Strategy
  - Department Heads appoint 33 Focal Points
  - Focal Points create & consult Focus Groups
  - HR implements Nat / Gen Population Dashboards
- 2022**
  - 1<sup>st</sup> D&I Review Exercise
  - Action Menu + Fitness Plans approved
  - Dept Heads appoint 18 D&I Officers (DIOs)
  - DIOs establish a Community of Practice
- 2023**
  - Transforming Bias Workshop
  - Theatre Forum on sexism
  - HR implements Nat / Gen Recruitment Dashboard
  - 1<sup>st</sup> Departmental Fitness Plan checkpoint



**FELL/GRAD**  
Fellow or Graduate Student

**STAFF**  
Everyone else

**MPE**  
Member of personnel (all of above)

# LGBTQ+ @ CERN

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## Informal Network

- Might become an official CERN Club

## Initiatives & Activities

- Organised raising of Diversity Flag on Promenade
- Helped push for non-binary registration
- Helped push for gender-neutral restrooms
- Helped push for preferred pronouns, names in phonebook
- Participate in Geneva Pride, Relay Race, Cupcakes, etc.

## In General

- Raising awareness
- Fighting to implement change
- Social Support Network



# Progress



CERN Promenade, November 2023

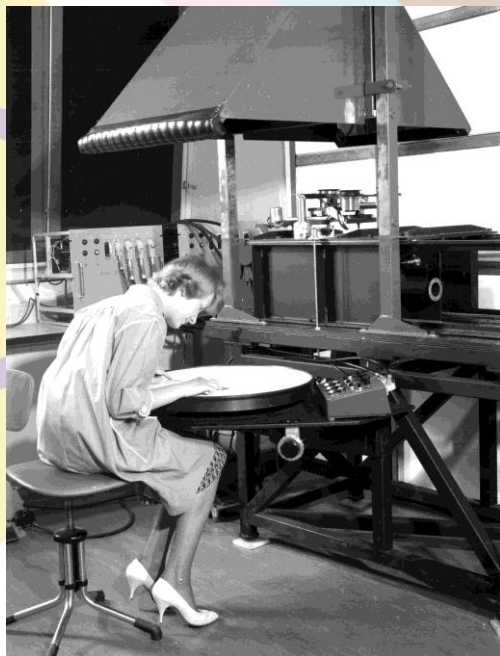


Non-Gendered Restroom at CERN

# Progress

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## From CERN Scanners to CERN Leadership







Thank you!