

# Diversity in Science: Why it matters

Flavia de Almeida Dias (she/her)

Universal Science - Vancouver 2023

27 June 2023



# About me

● We are here!

CALTECH

Univ. Edinburgh

Niels Bohr Inst.

UvA/Nikhef

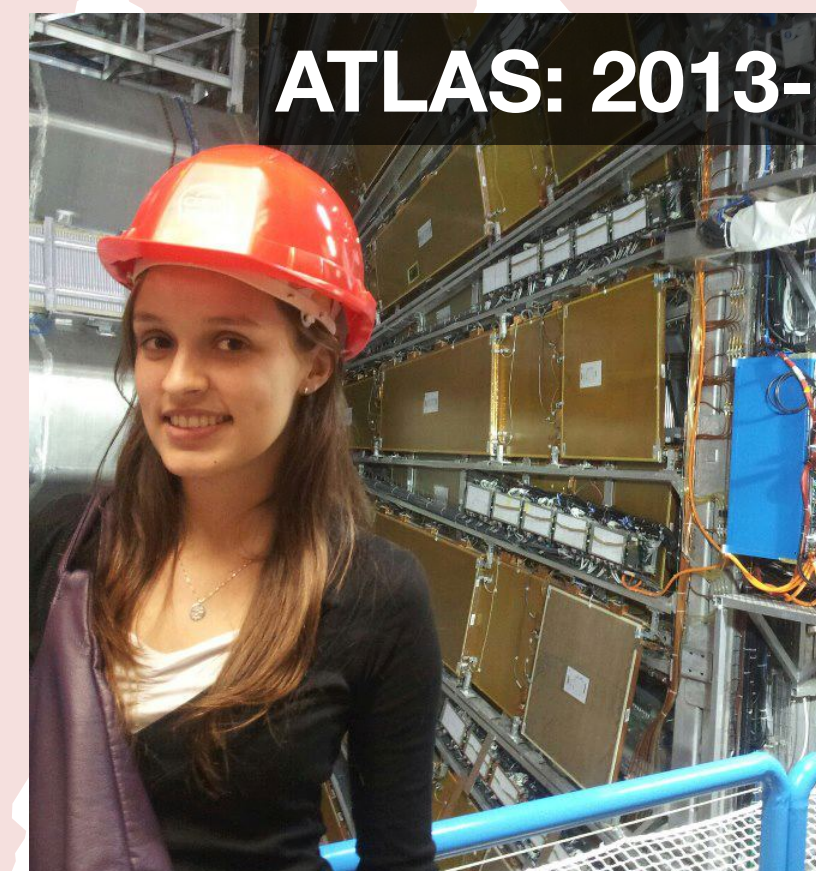
CERN



São Paulo Univ.



LGBTQ+ CERN



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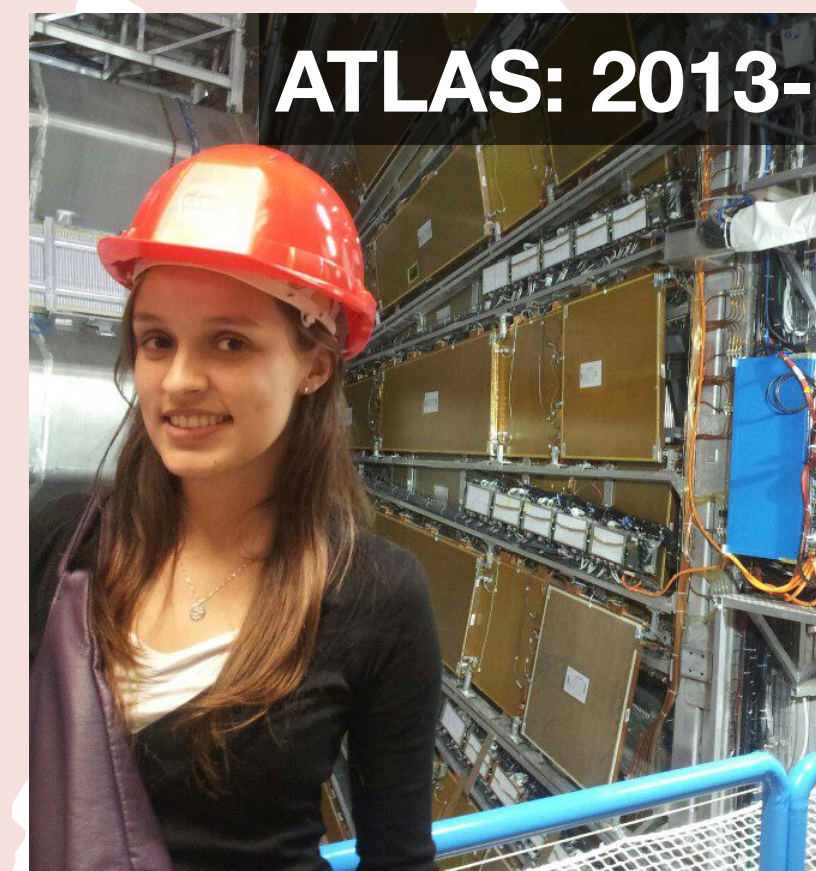
**NOT** a social scientist!  
**PERSONAL** view  
(not CERN, not ATLAS, not  
UvA/Nikhef)



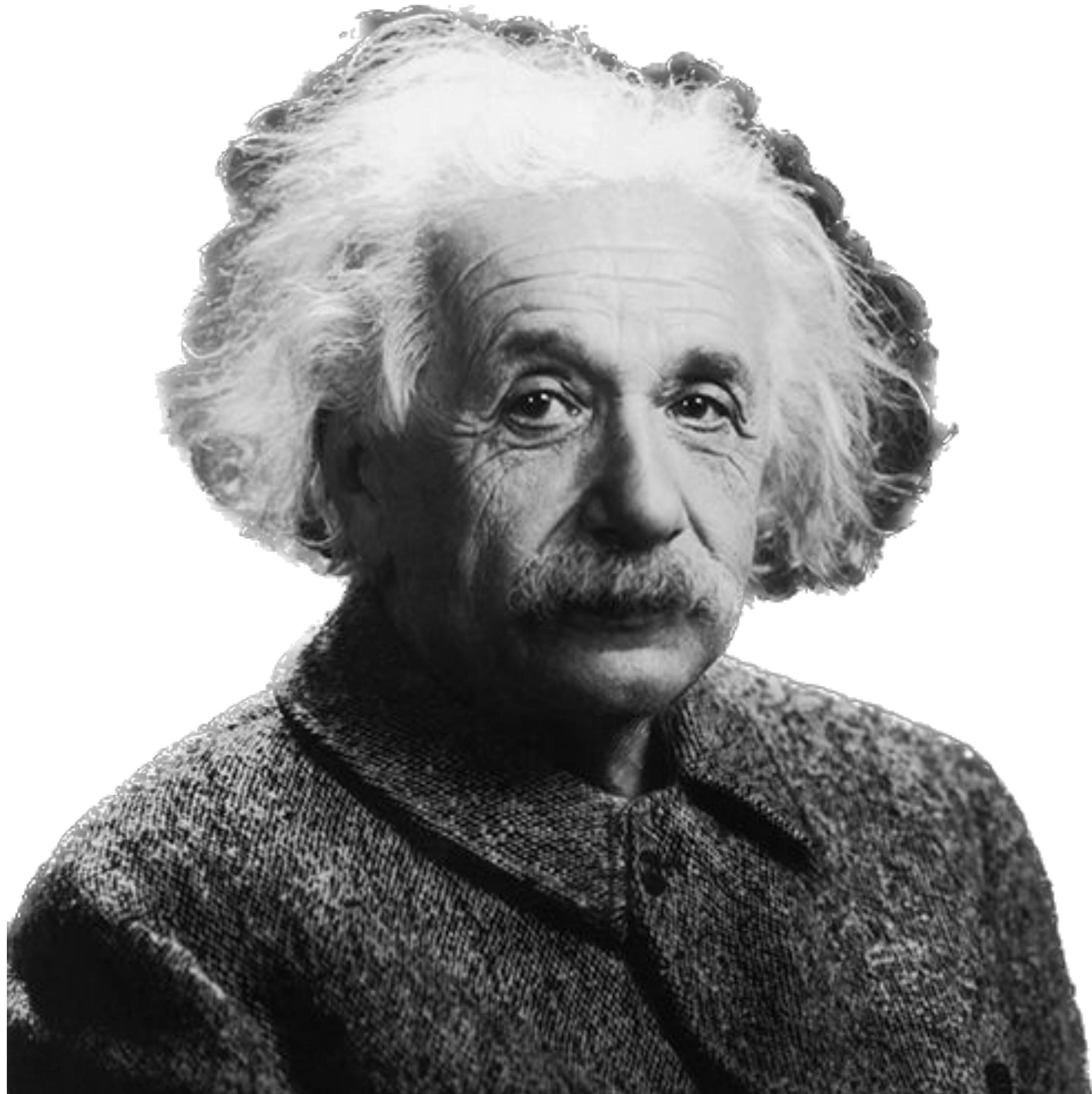
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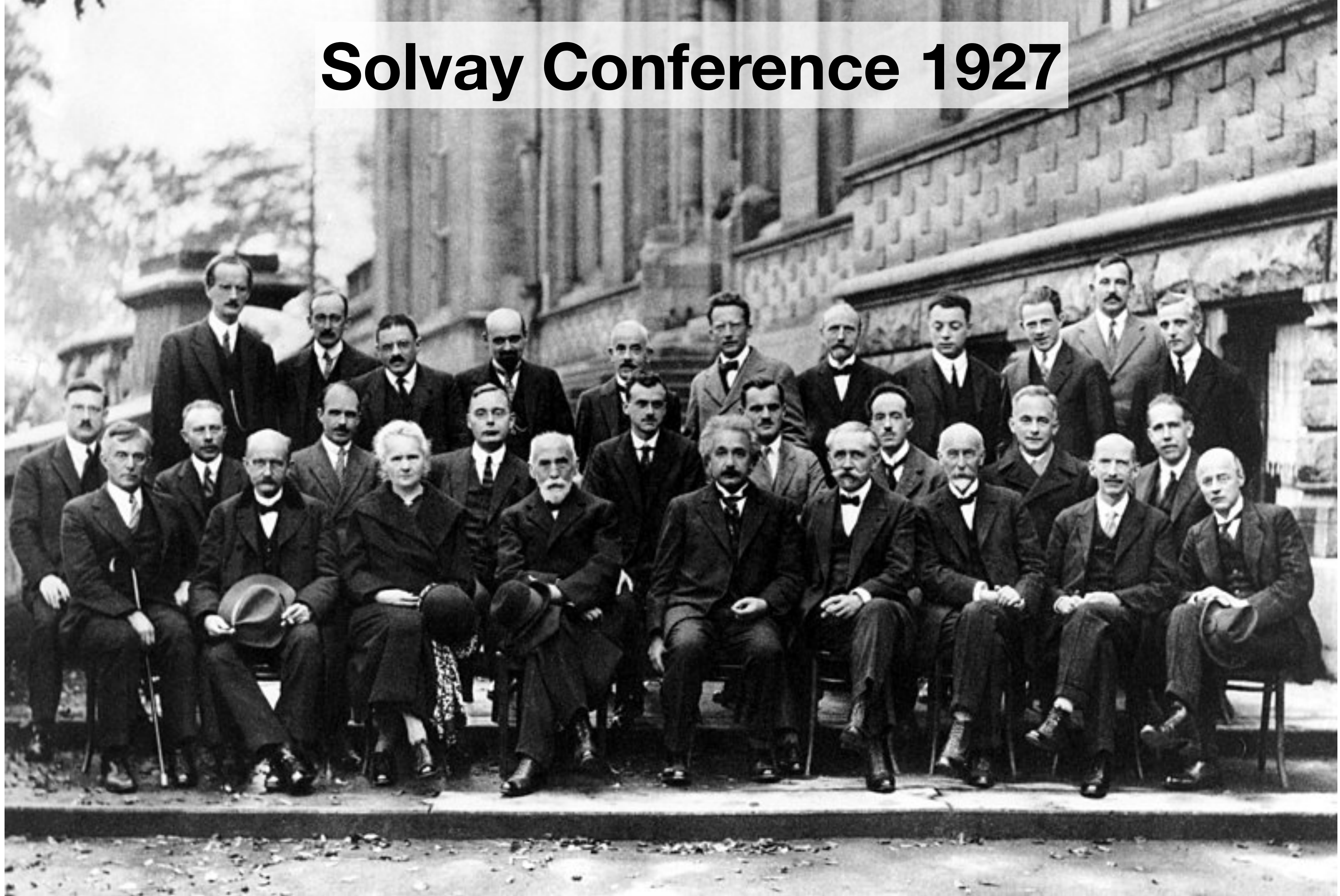
**LGBTQ+ CERN**



**What does a physicist  
looks like?**

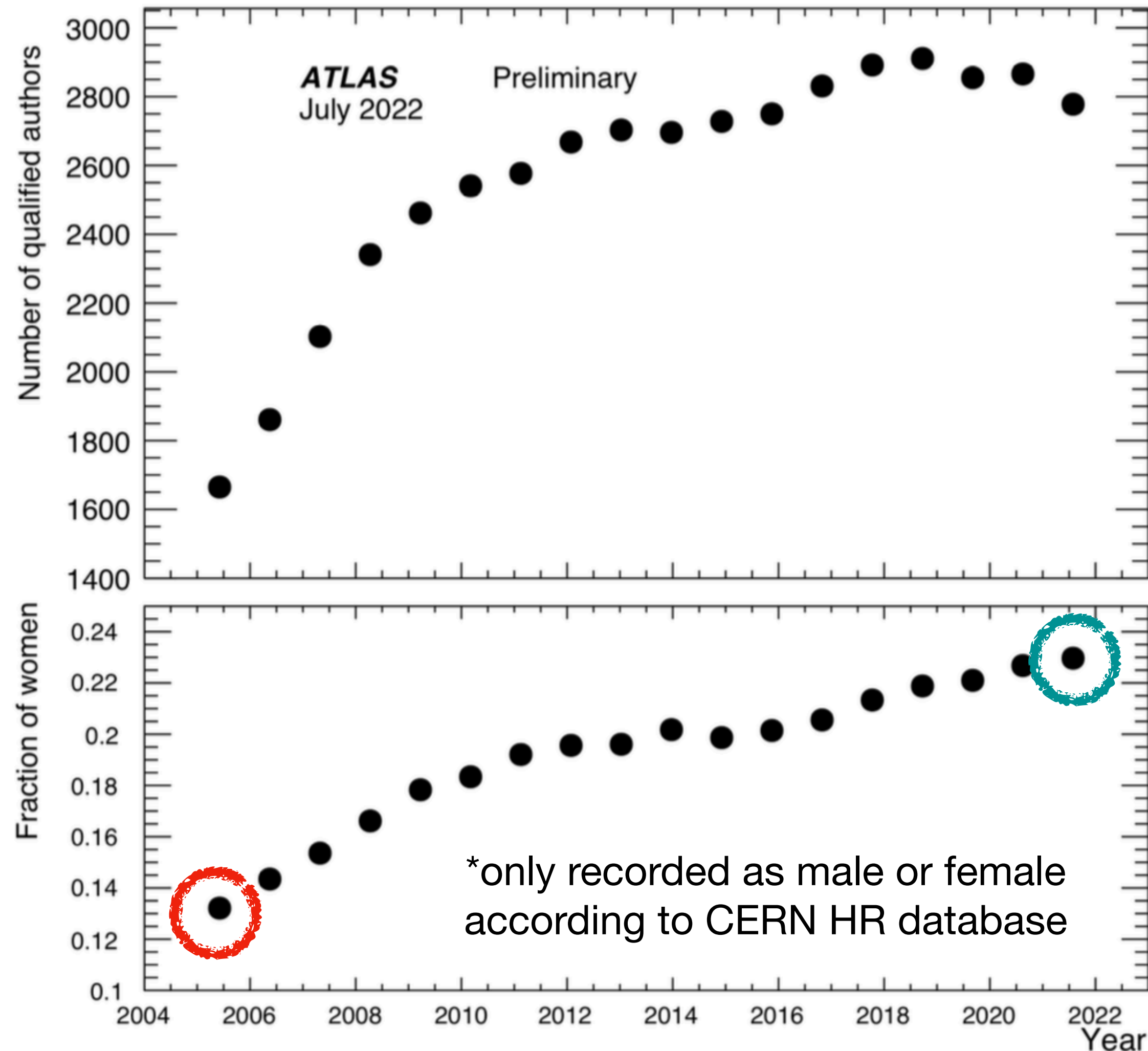


# Solvay Conference 1927



# ATLAS gender diversity in numbers

## Source



**2005:** 13%, 4 females in Solvay picture

**2022:** 23%, 7 females in Solvay picture

**19.7%** authors over 35y are women

**2021:** Women employed by CERN in STEM roles: 12.3 %

# Gender diversity: Reality

ETHICS | RESEARCH UPDATE

## Female academics do more admin than their male colleagues

23 May 2017



Doing the dirty work: women do more admin than men. (Courtesy: iStock / SebastianGauert)

**Source**

## APSNews

March 2016 (Volume 25, Number 3)

### APS Addresses Sexual Harassment Scandals

By Emily Conover

**Source**

Science · Analysis

### Canadian Nobel scientist's deletion from Wikipedia points to wider bias, study finds



Physicist Donna Strickland's case wasn't unique: A new study suggests why women's profiles get erased

Manjula Selvarajah · CBC News · Posted: Aug 19, 2021 1:00 AM PDT | Last Updated: August 19, 2021



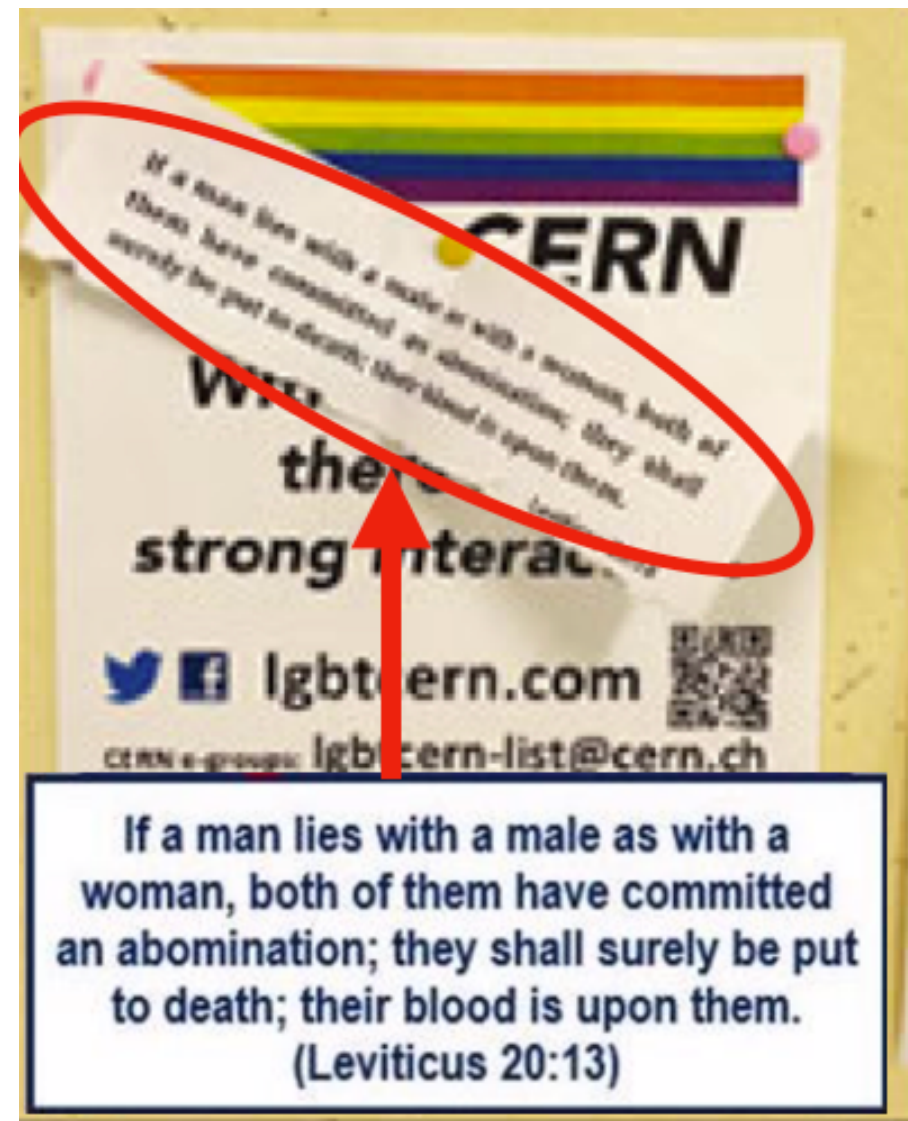
**Source**



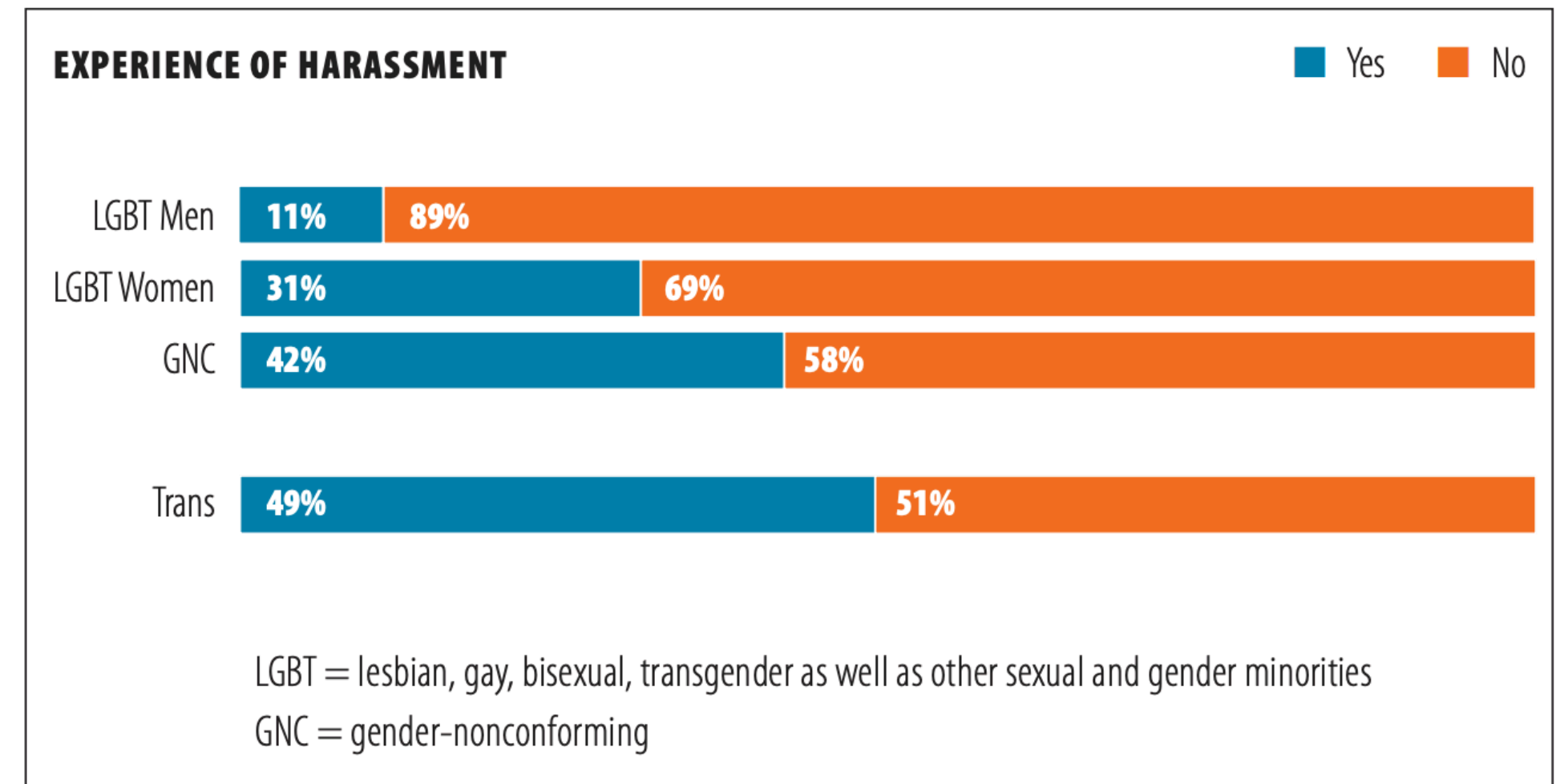
**Gender diversity: diagnostic**

**Race, economic background,  
disability, LGBTQ+:  
less represented than females**

# LGBTQ+ in Physics



More than 1 in 3 LGBT physicists considered leaving their campus or workplace in the last year.



## Violent deaths of LGBT people in Brazil hit all-time high

[source](#)

At least 445 LGBT Brazilians died as victims of homophobia in 2017, new research reveals, following a 30% spike in just one year

Europe

## Homophobic Crimes on the Rise in France, Data Show

By Agence France-Presse  
May 16, 2020 06:06 PM

[source](#)

## Gay physicists collide with bigotry at Cern

[source](#)



# **LGBTQ CERN**

***Without colors,  
there's no  
strong interaction.***

Building community  
Raising awareness  
Having a fabulous time



 [lgbtqcern-contact@cern.ch](mailto:lgbtqcern-contact@cern.ch)

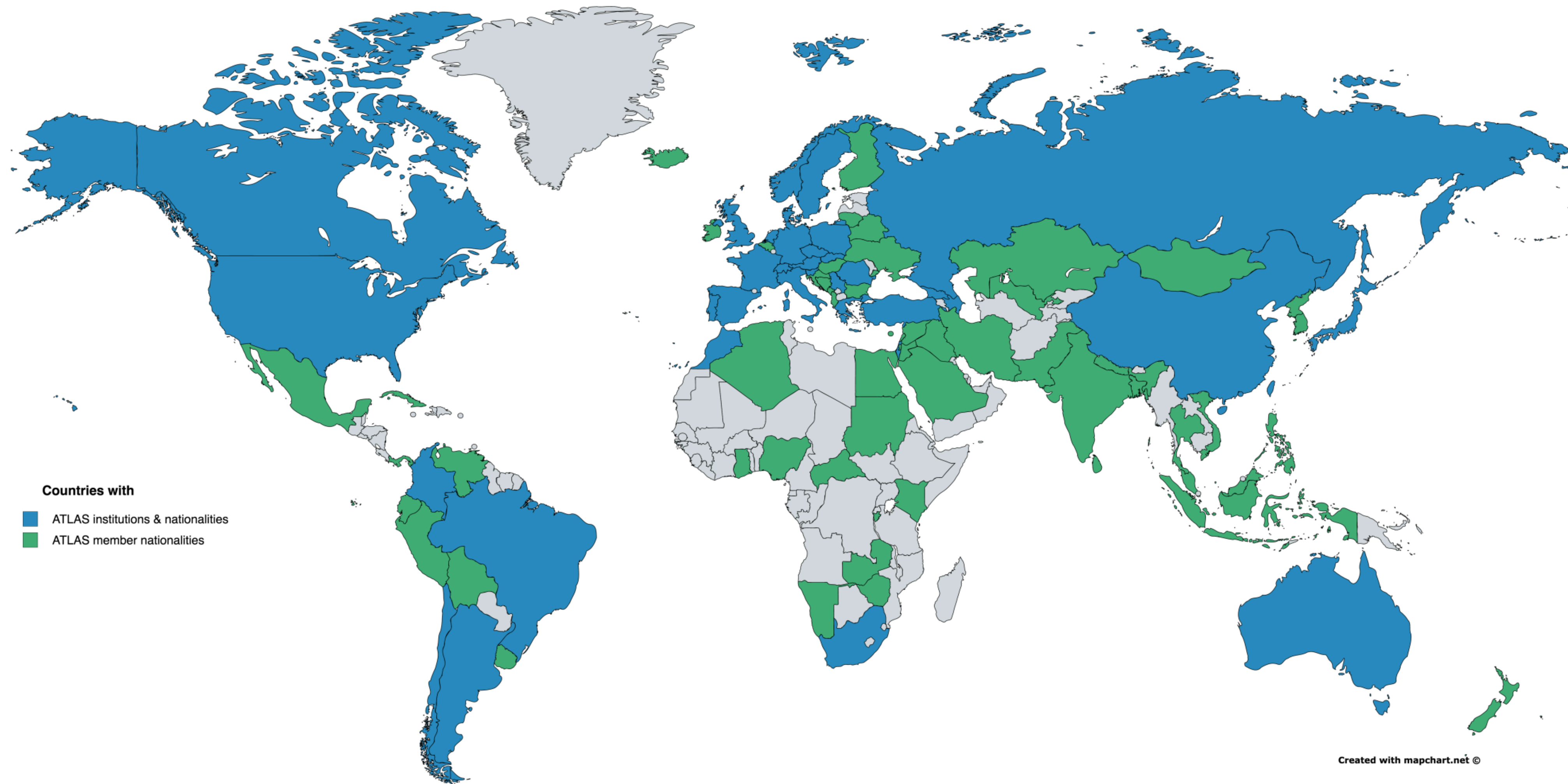
 @LGBTQCERN

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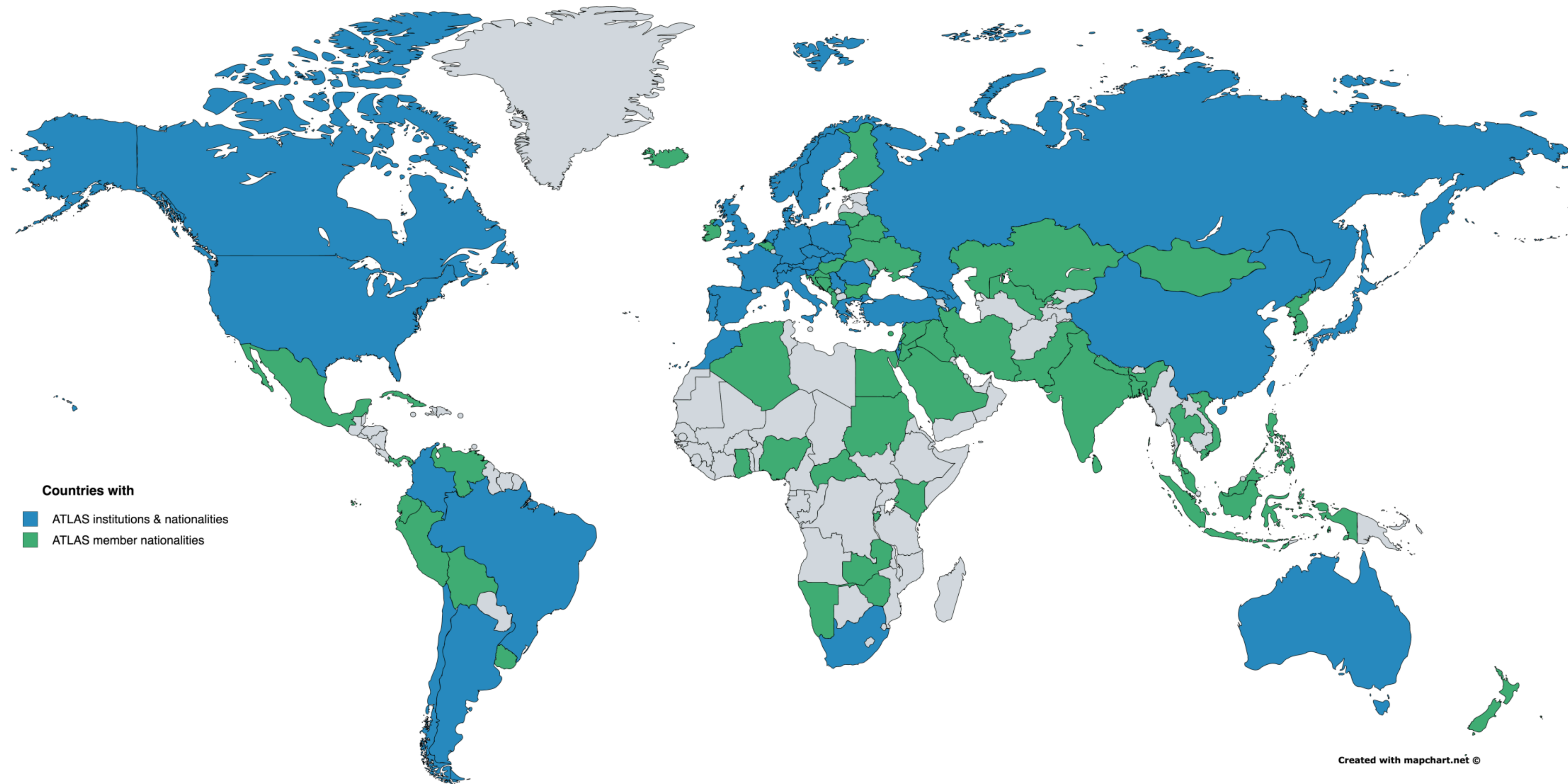
 @lgbtqcern/

 <https://lgbtqcern.com/>

# An international endeavour...



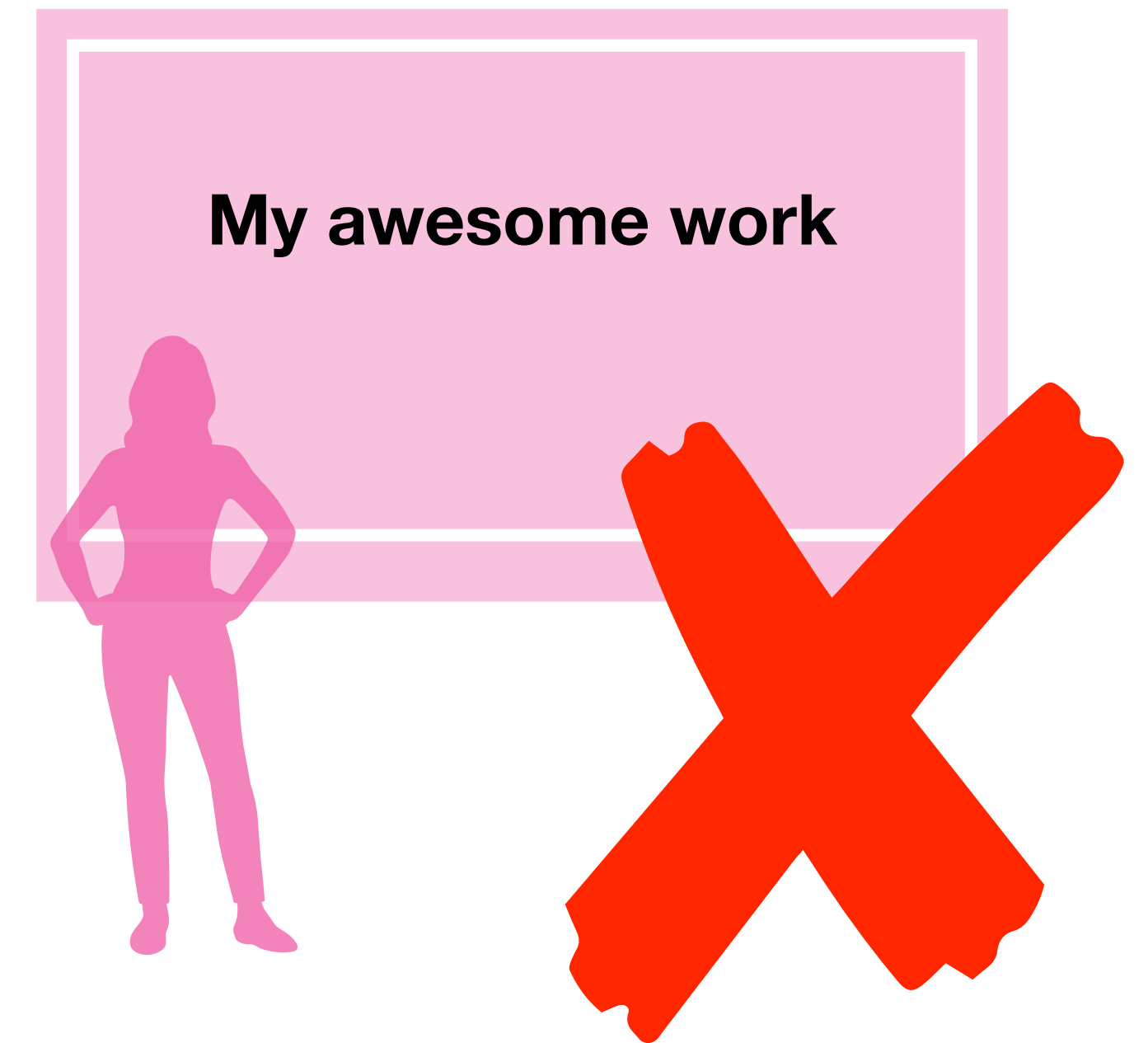
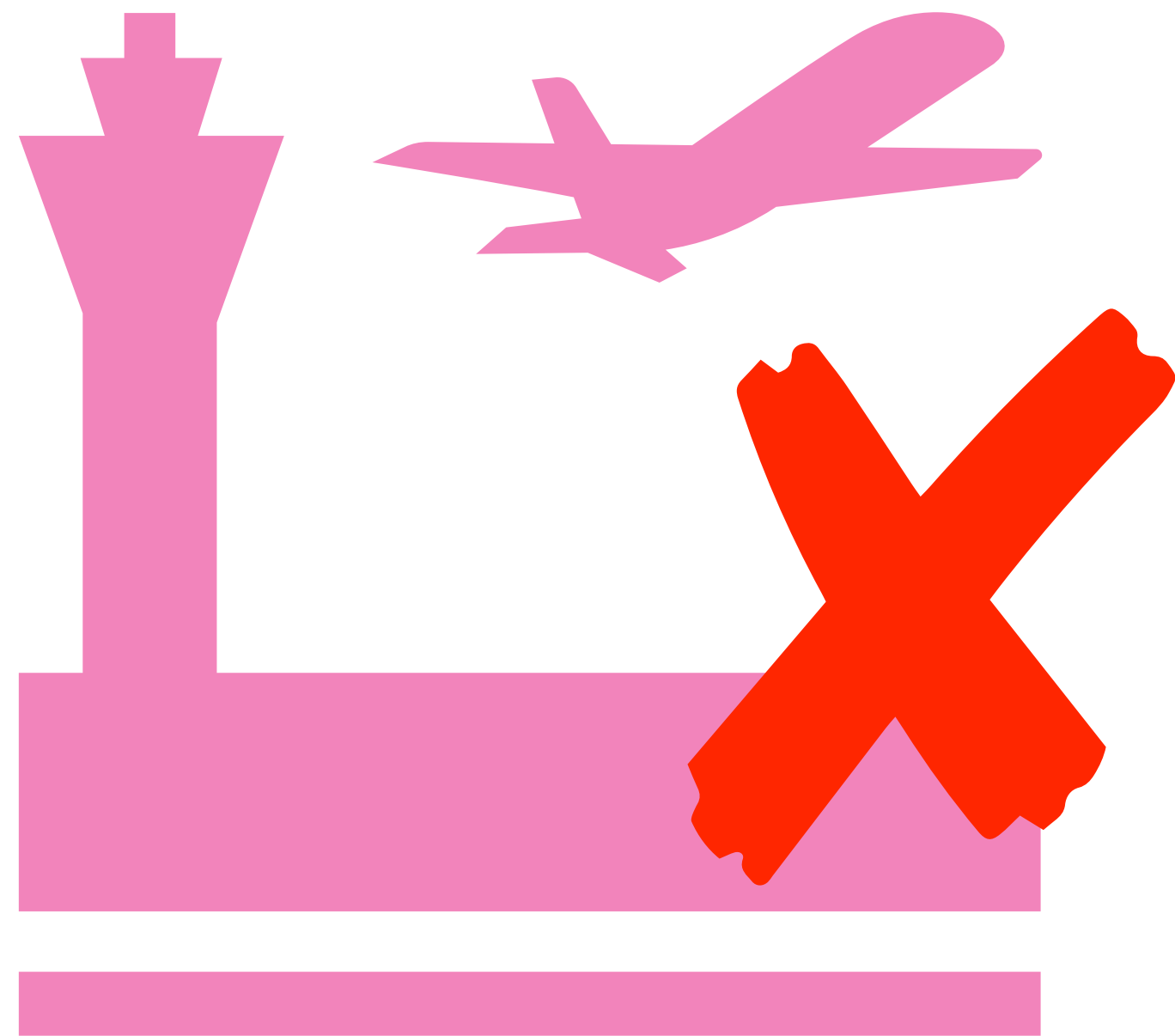
# An international endeavour...



**But does everyone have the same opportunities?**

# Accessibility matters!

- Colleagues from various nationalities routinely get their visas denied / not issued on time



# Action points

- **Deliberate efforts and a multi-faceted approach**
  - ➔ Outreach and Education
  - ➔ Recruitment and Hiring Practices
  - ➔ Mentorship and Support
  - ➔ Inclusive Research Culture
  - ➔ Bias Awareness and Training
  - ➔ Representation and Visibility
  - ➔ Data Collection and Analysis



**Universal Science**



**<https://physicsmasterclasses.org/>**

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Diversity and inclusion

## Bell Burnell Graduate Scholarship Fund

An innovative fund instigated by leading physicist Professor Dame Jocelyn Bell Burnell and the Institute of Physics to encourage greater diversity in physics by assisting PhD physics students from under-represented groups.

[Link](#)

**CERN 25 by 25 initiative**

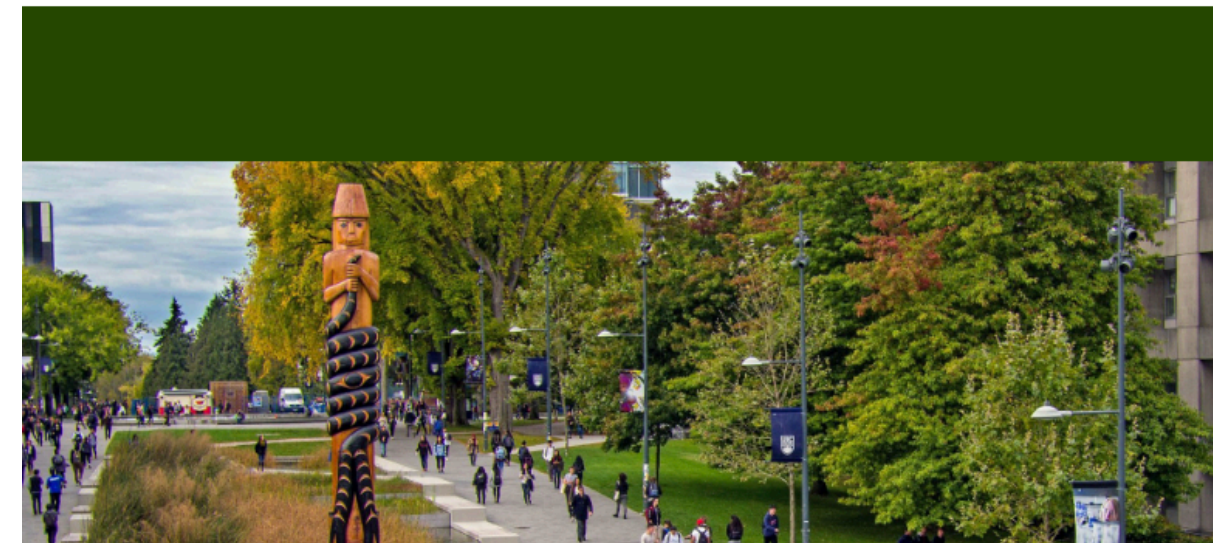




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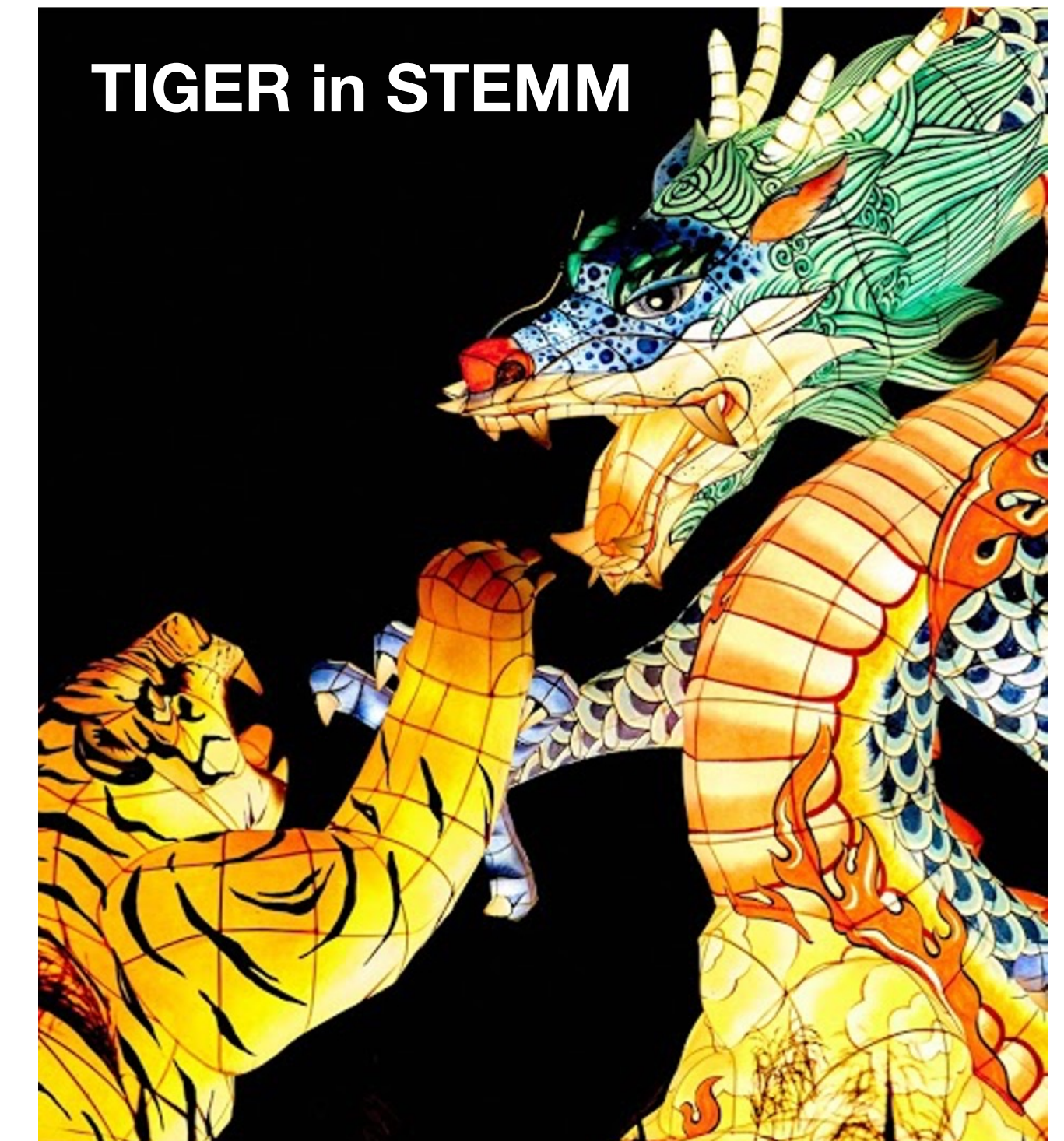
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## IMPulse Mentorship



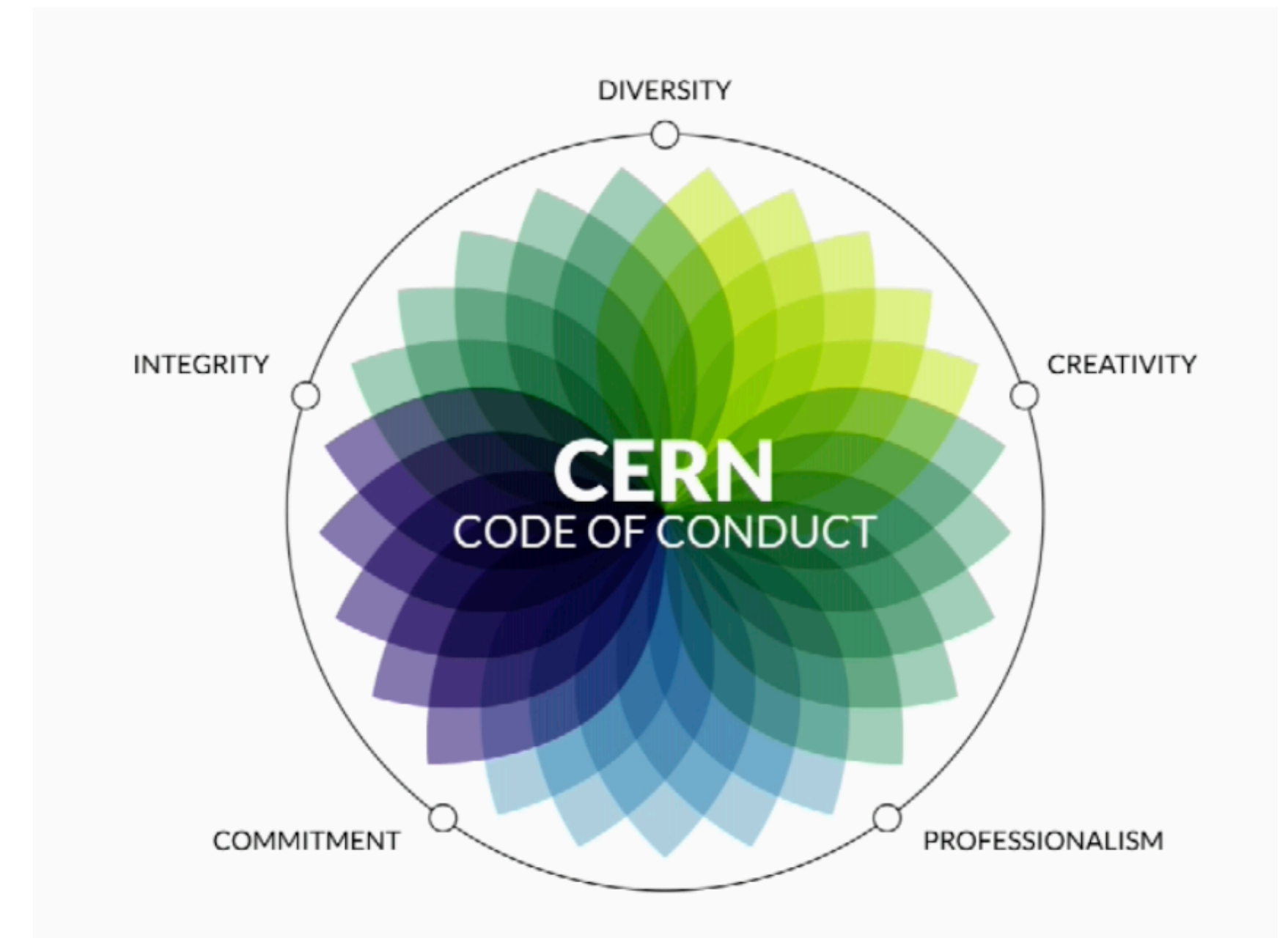
## **IMPulse Mentorship Program**

## Physics Without Frontiers



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<https://diversity-and-inclusion.web.cern.ch/>

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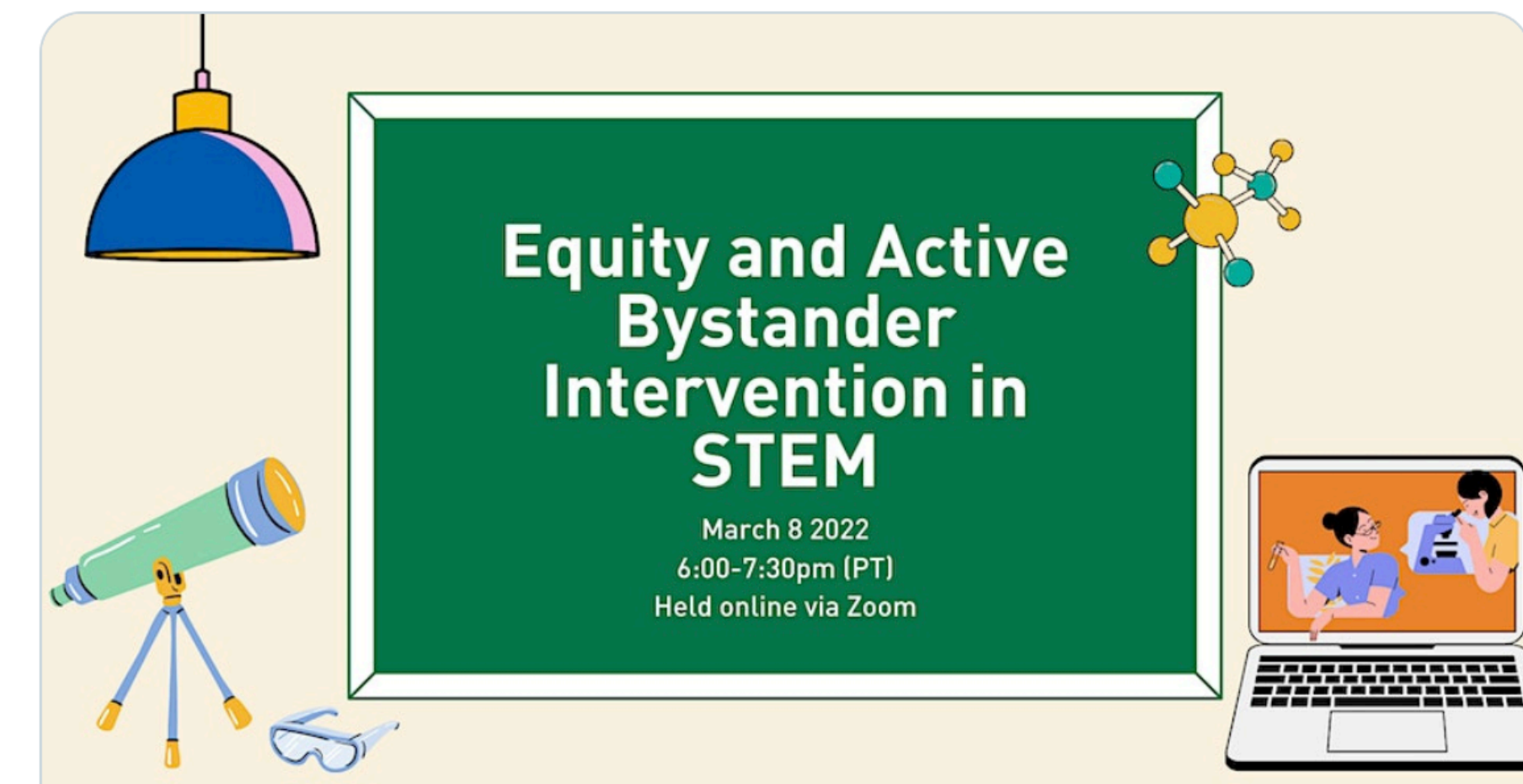


SFU Science  
@SFU\_Science

...

Science graduate students are invited to March 8th's "Equity and Active Bystander Intervention in STEM" workshop to discuss the documentary film "Picture a Scientist" and the issue of gender equity and inclusivity in Science fields.

Register here:



eventbrite.ca

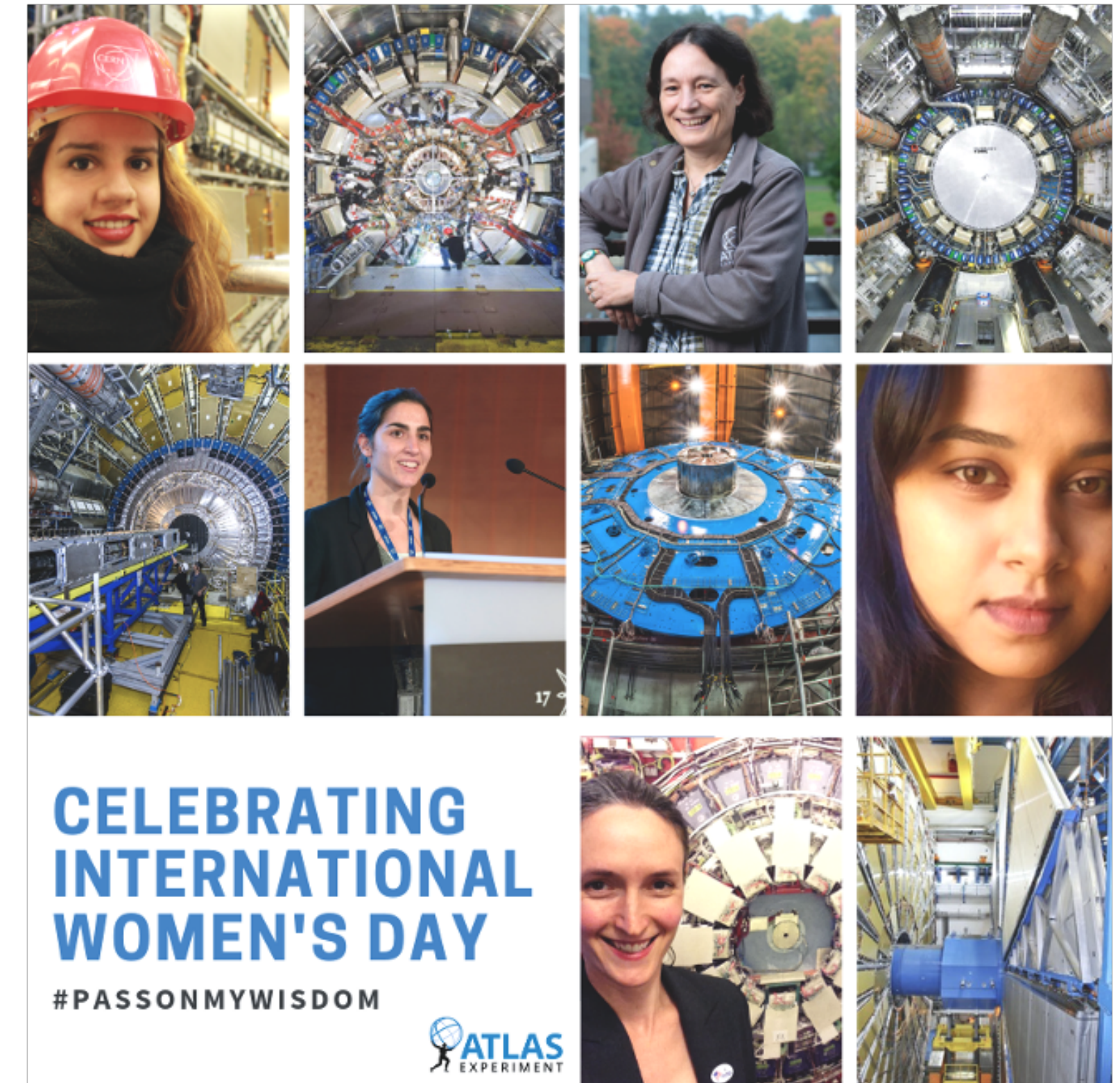
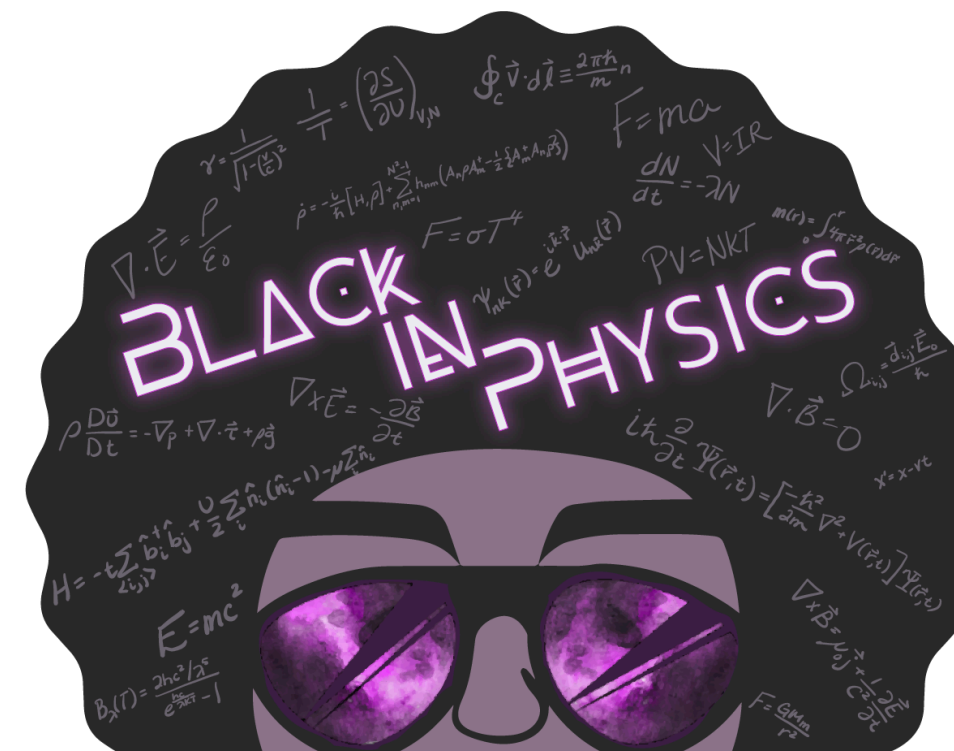
Equity and Active Bystander Intervention in STEM

A discussion of the documentary film Picture a Scientist and the issue of gender equity and inclusivity in STEM

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# Call to action



- Put your **money** where your mouth is:
  - ➔ Pay a living wage
  - ➔ Pay work trips in advance
  - ➔ Fund training
  - ➔ Fund outreach to underrepresented communities

**Thank you!**