

# Cosmic diversity: LGBTBQ+ inclusion in Academia

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*Postdoctoral researcher*  
*Universitat de València – Departament d'Astronomia i Astrofísica*

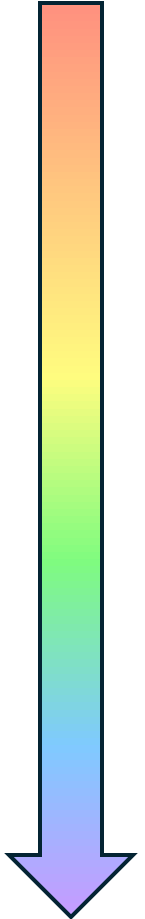
*Flavourful Physics Workshop @ IFIC*  
*Paterna, Feb 3<sup>rd</sup> 2025*



# About me

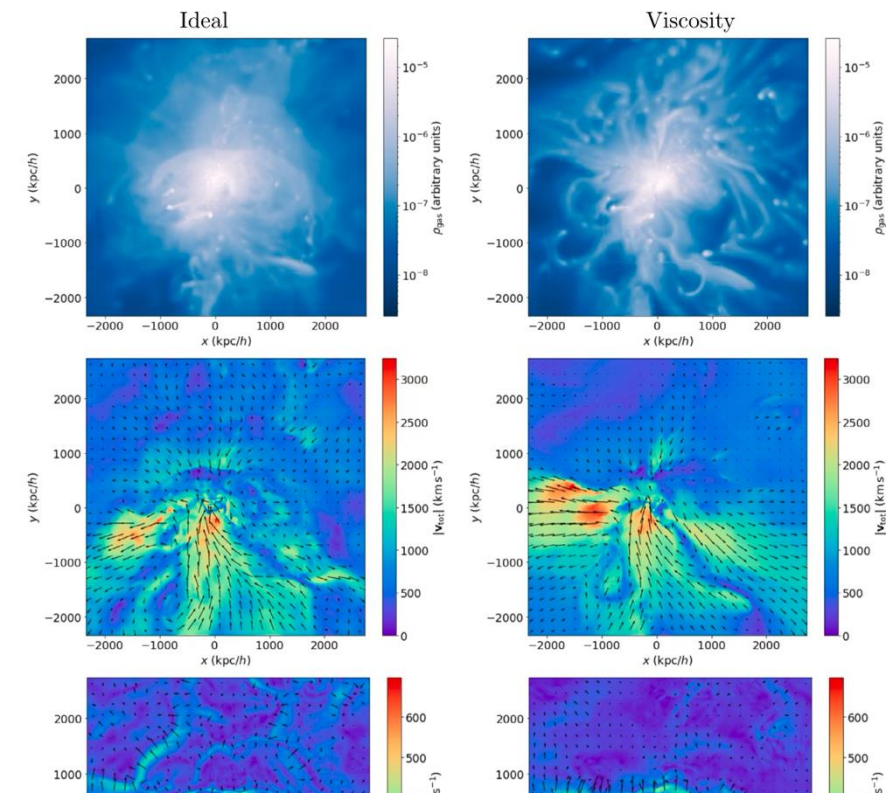
– *David Vallés-Pérez*

- Bachelor + Masters in Physics @ Facultat de Física (UV)
  - 2015-2020
- PhD in Astrophysics @ Departament d'Astronomia i Astrofísica (UV)
  - 2020-2024
- Postdoc @ ibidem
  - until June 2025!

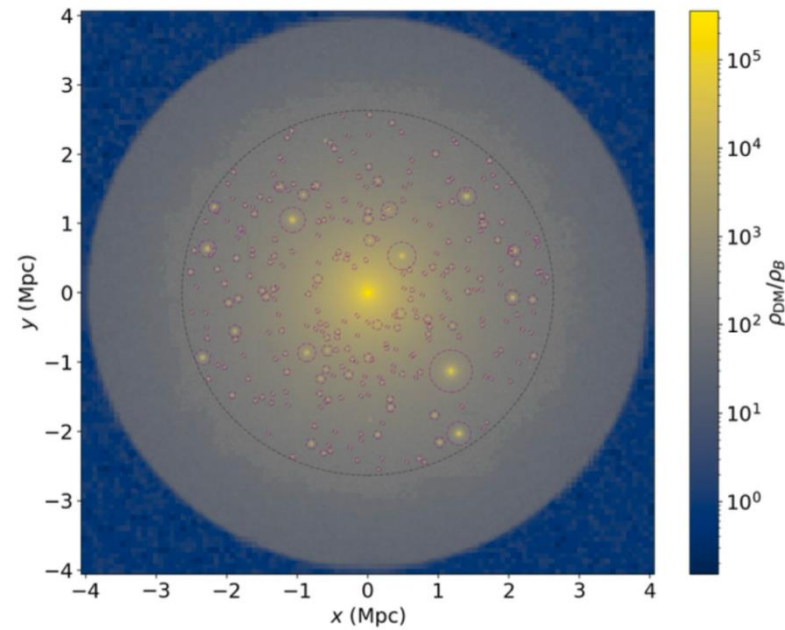


# About my science

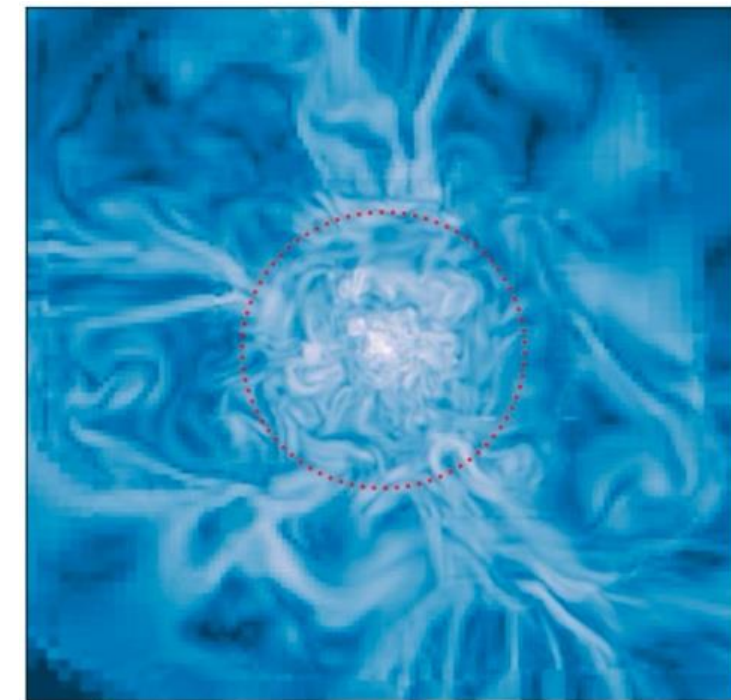
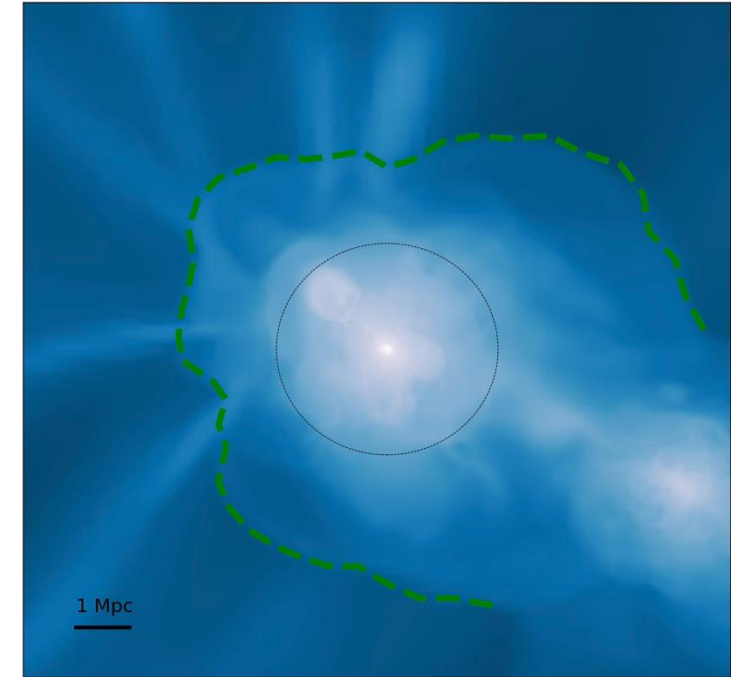
- Computational Cosmology w/ a focus on galaxy clusters & hydrodynamics



doi:10.3847/1538-4357/ad8127



doi:10.1051/0004-6361/202243712



doi:10.1093/mnras/stab880

# Science is done by **scientists!!**



News Feature | Published: 16 September 2014

## Diversity: Pride in science

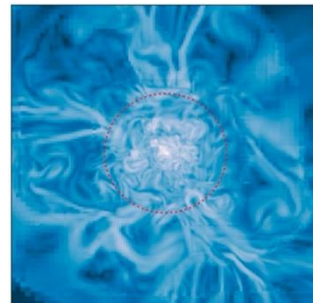
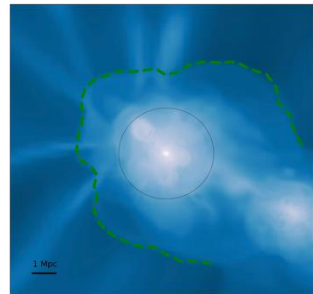
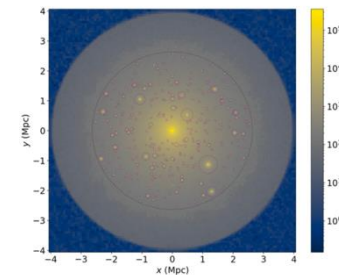
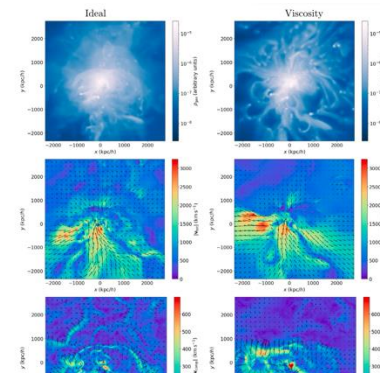
[M Mitchell Waldrop](#)

[Nature](#) **513**, 297–300 (2014) | [Cite this article](#)

*“There is growing evidence that embracing diversity — in all its senses — is key to doing good science. But there is still work to be done to ensure that inclusivity is the default, not the exception.”*

— [Nature](#) 513, 279, editorial,  
“[Diversity challenge](#)” (2014)

- Science (physics) as a human(istic) activity
- Including voices historically excluded improves science quality!



What does the data say?

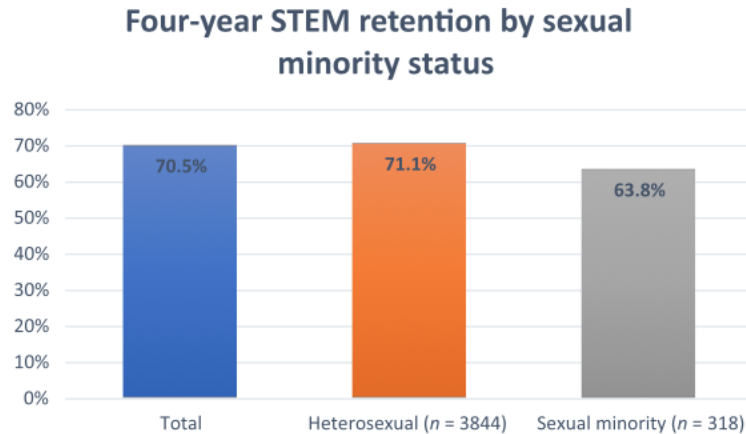
# What does the data say?

SCIENCE ADVANCES | RESEARCH ARTICLE

## SOCIAL SCIENCES

### Coming out in STEM: Factors affecting retention of sexual minority STEM students

Bryce E. Hughes\*



**Fig. 1. Proportion of students who aspired to a STEM degree at college entry, in 2011, and who also indicated a STEM major at the end of their fourth year, in 2015, in total and disaggregated by sexual minority status.**

doi:10.1126/sciadv.aao6373



# What does the

JOURNAL OF HOMOSEXUALITY  
2016, VOL. 63, NO. 1, 1–27  
<http://dx.doi.org/10.1080/00918369.2015.1078632>

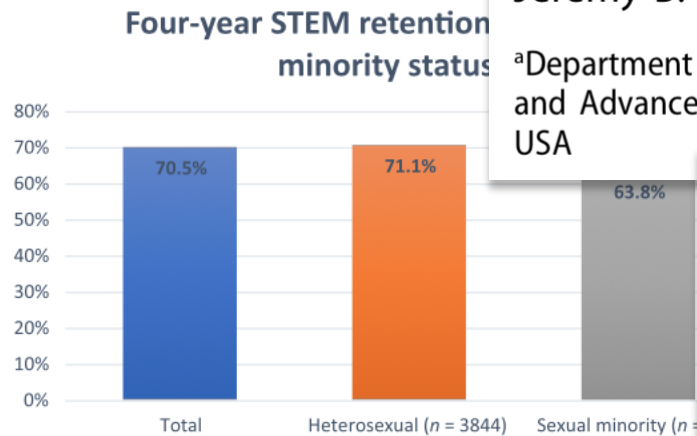
 **Routledge**  
Taylor & Francis Group

SCIENCE ADVANCES | RESEARCH ARTICLE

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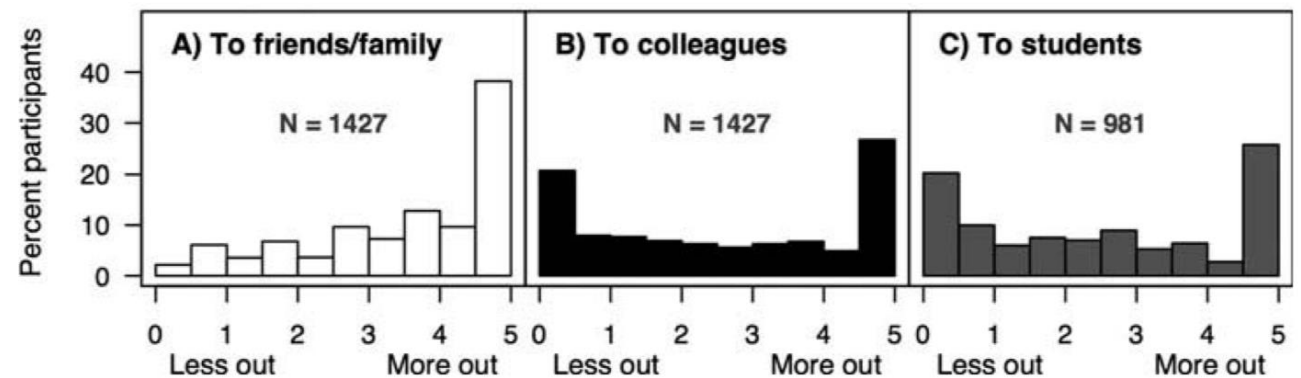
**Fig. 1.** Proportion of students who aspired to a STEM degree at college entry in 2011, and who also indicated a STEM major at the end of their fourth year in 2015, in total and disaggregated by sexual minority status.

## Queer in STEM: Workplace Experiences Reported in a National Survey of LGBTQA Individuals in Science, Technology, Engineering, and Mathematics Careers

Jeremy B. Yoder, PhD<sup>a</sup> and Allison Mattheis, PhD<sup>b</sup>

<sup>a</sup>Department of Plant Biology, University of Minnesota, St. Paul, Minnesota, USA; <sup>b</sup>Division of Applied and Advanced Studies in Education, California State University, Los Angeles, Los Angeles, California, USA

### Openness in different contexts



**Figure 1.** Histograms of participants' openness ratings in (A) personal contexts, (B) to colleagues, and (C) to students. Note that only participants working in degree-granting institutions (academics) are included in panel C.

[doi:10.1126/sciadv.aao6373](https://doi.org/10.1126/sciadv.aao6373)

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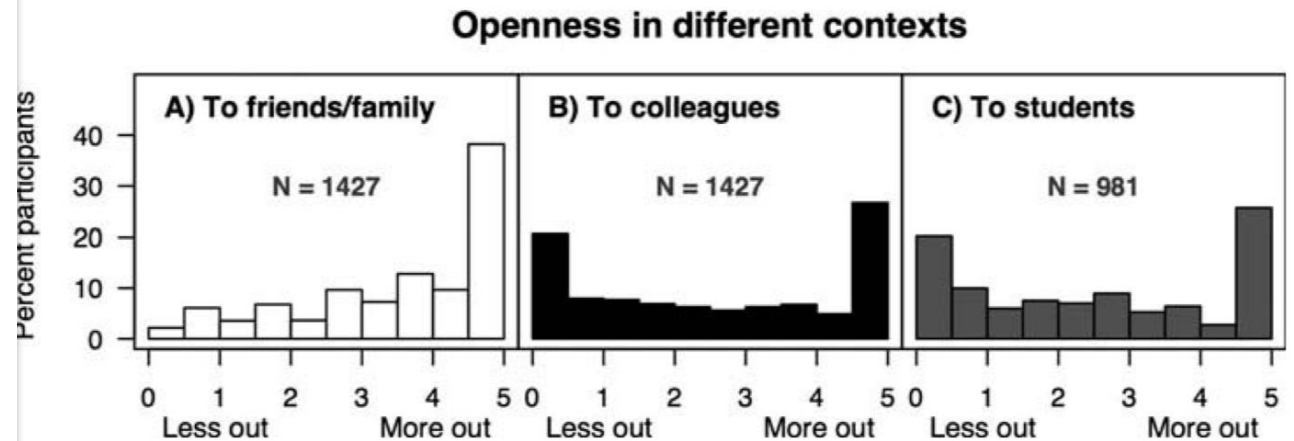
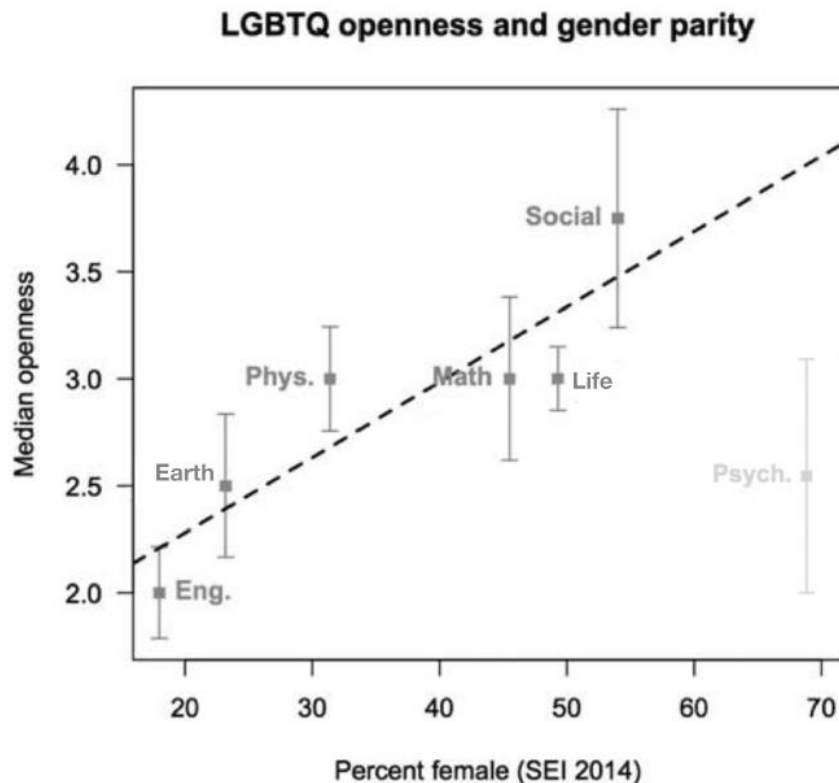
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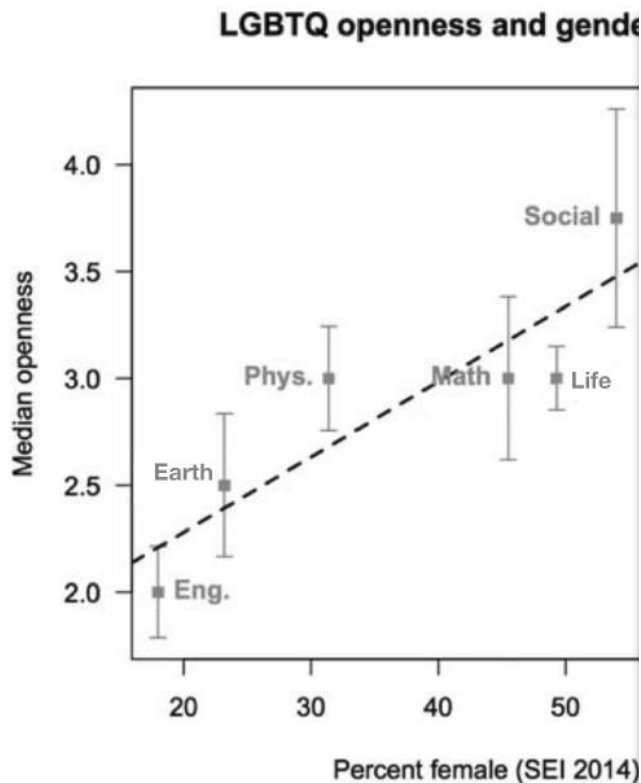


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SCIENCE ADVANCES | RESEARCH ARTICLE

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### Coming out in STEM: Factors affecting sexual minority STEM students



JOURNAL OF HOMOSEXUALITY  
2016, VOL. 63, NO. 1, 1–27  
<http://dx.doi.org/10.1080/00918369>

### Queer in STEM: Work and Life National Survey of LGBT Technology, Engineering, and

- 1 | LGBT physicists have faced uneven protection from legislation and policies.
- 2 | The overall climate experienced by LGBT physicists was hostile.
- 3 | In many physics environments social norms established expectations of closeted behavior.
- 4 | Isolation was a common theme for many LGBT physicists.
- 5 | A significant fraction of LGBT physicists have experienced or observed exclusionary behavior.
- 6 | LGBT physicists with additional marginalized identities faced greater levels of discrimination.
- 7 | Transgender and gender-nonconforming physicists encountered the most hostile environments.

LGBT Climate in Physics

Routledge  
Taylor & Francis Group

BUILDING  
INCLUSIVE  
COMMUNITY

# What does the

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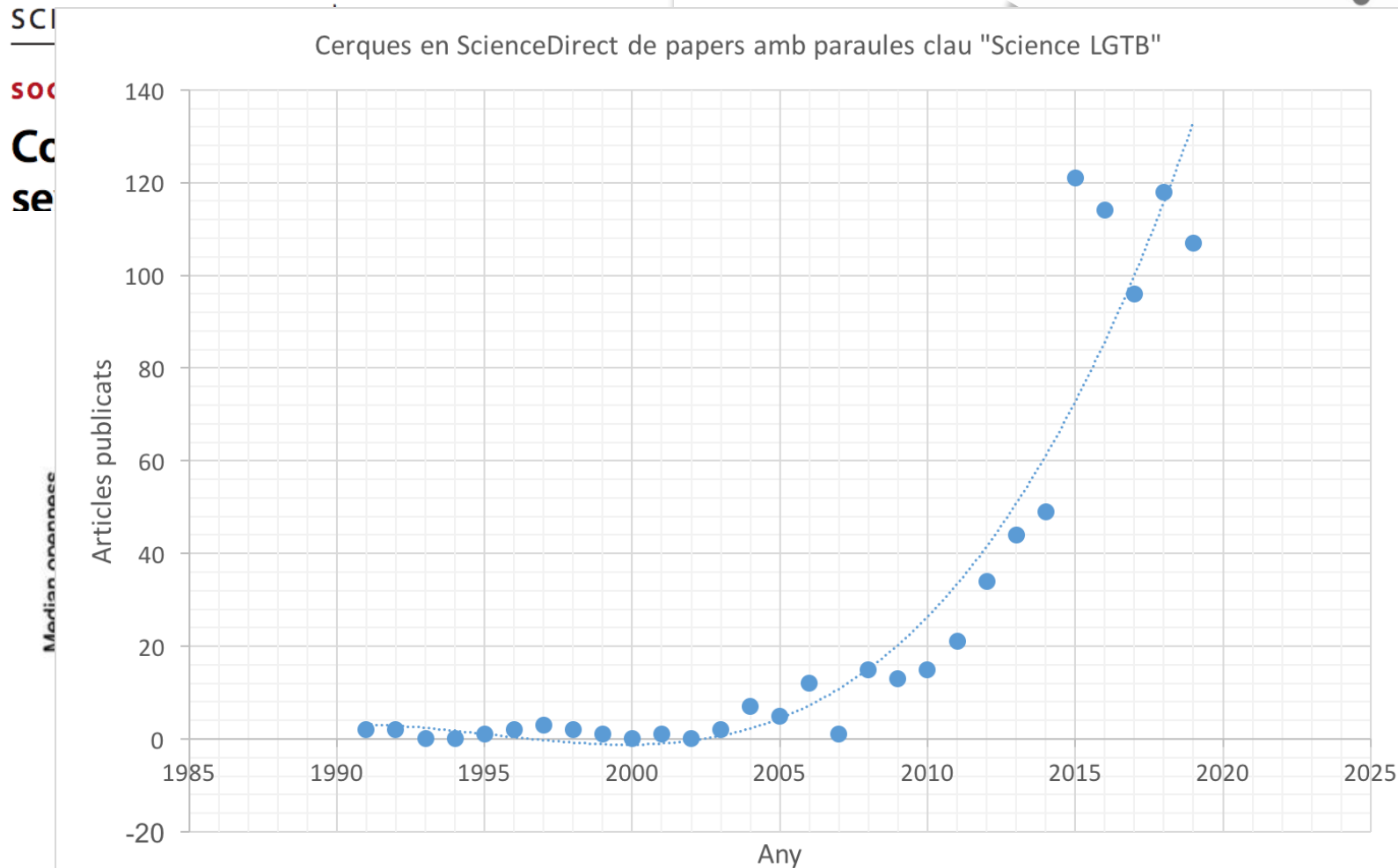
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LGBT

Climate  
Physics

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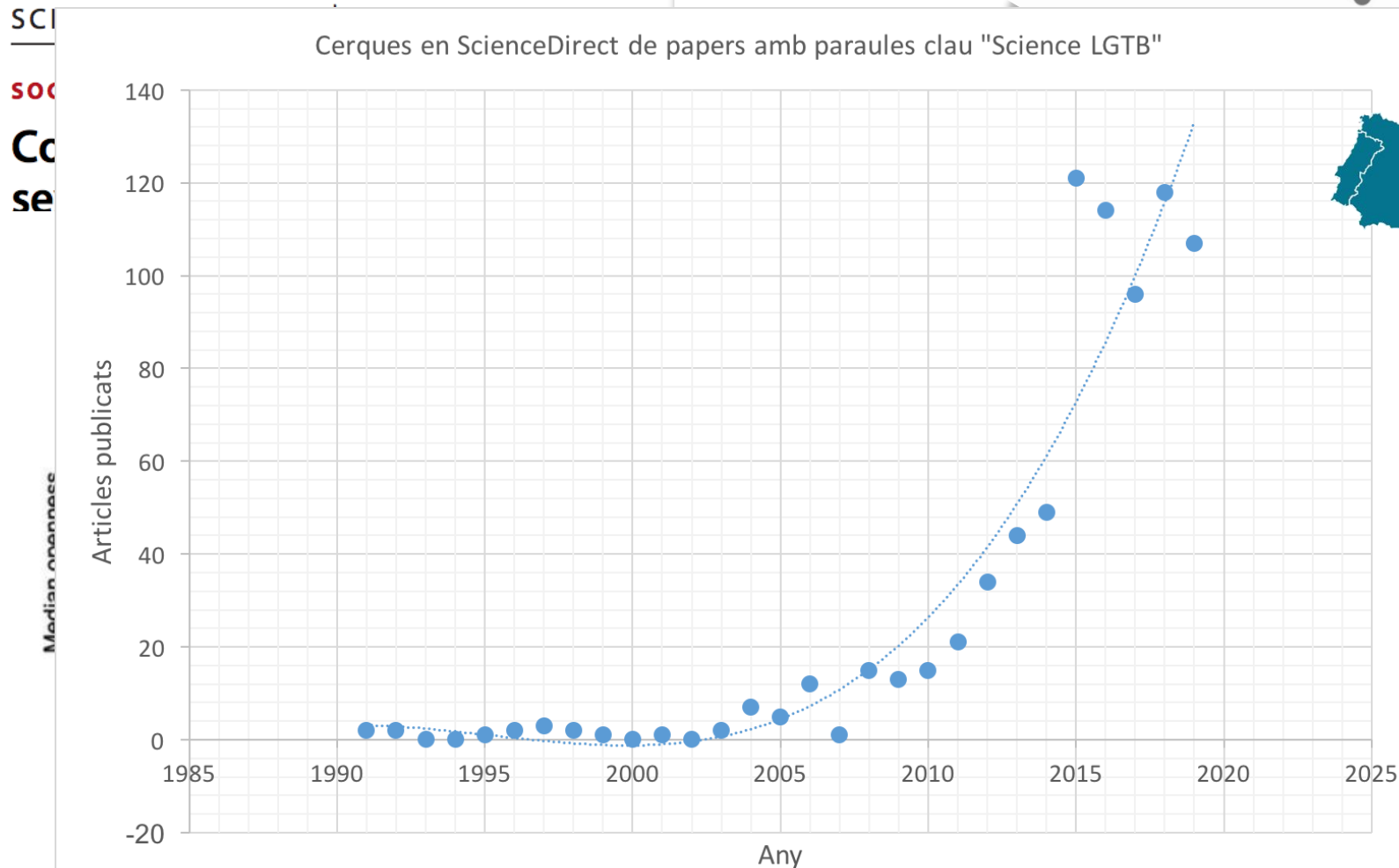


Percent female (SEI 2014)

Transgender and gender-nonconforming physicists encountered the most hostile environments.

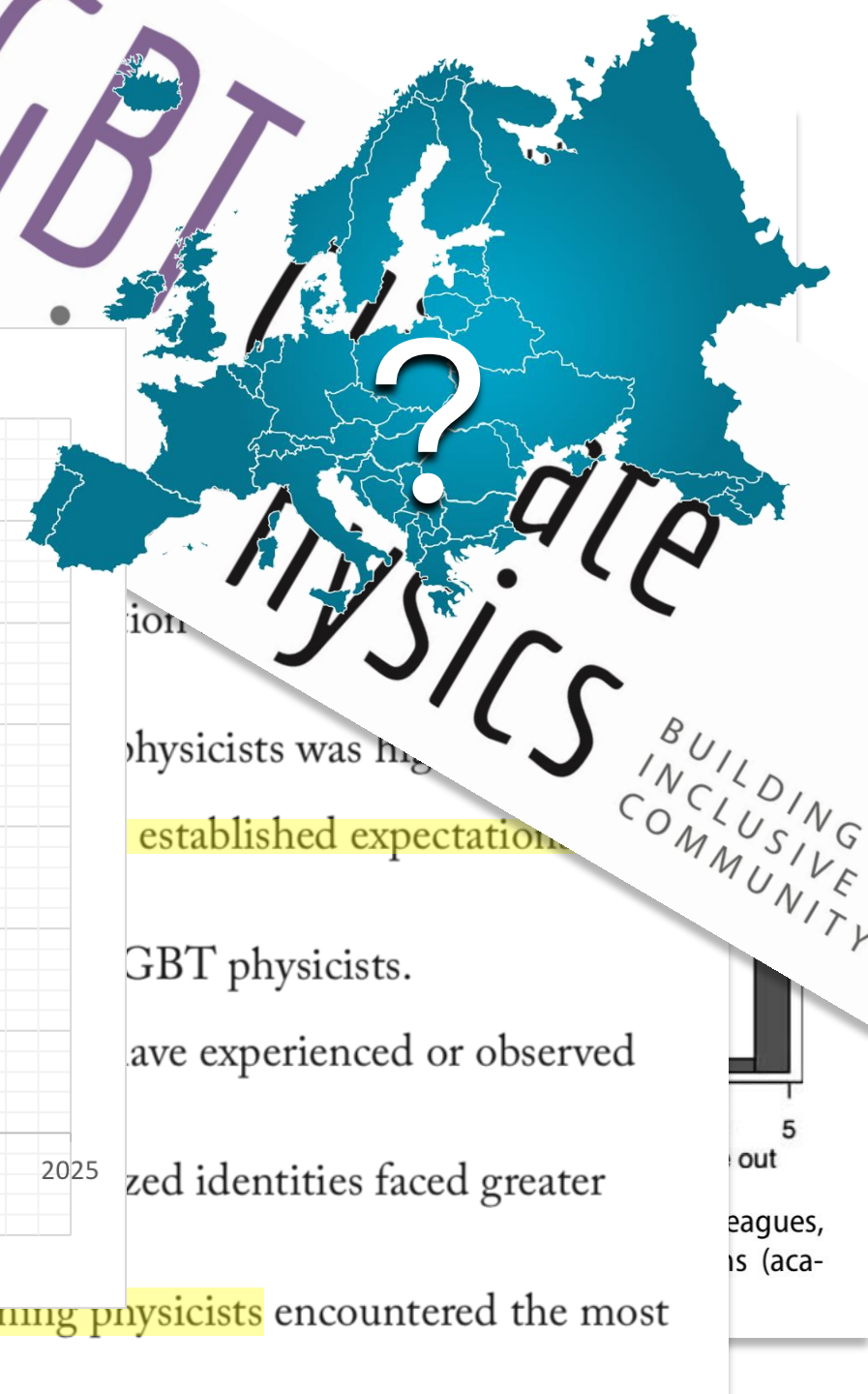
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Opinion

# Why Is Science So Straight?

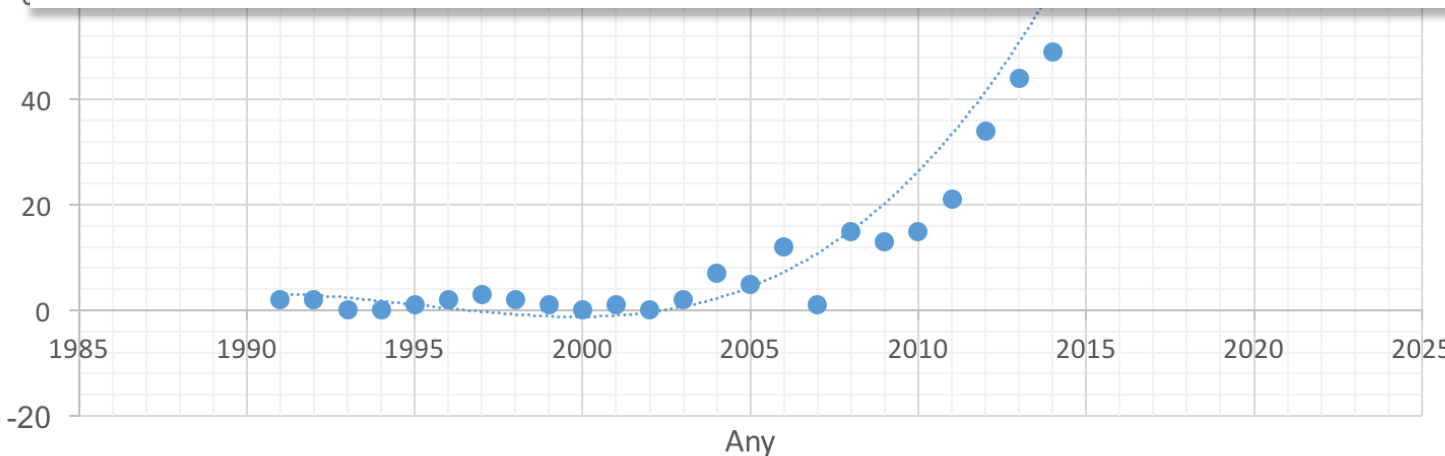


By Manil Suri

Sept. 4, 2015

(NYTimes)

Articles published



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GBT physicists.

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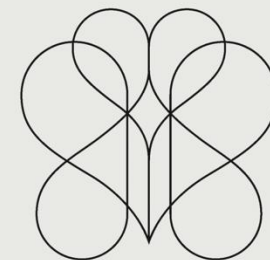
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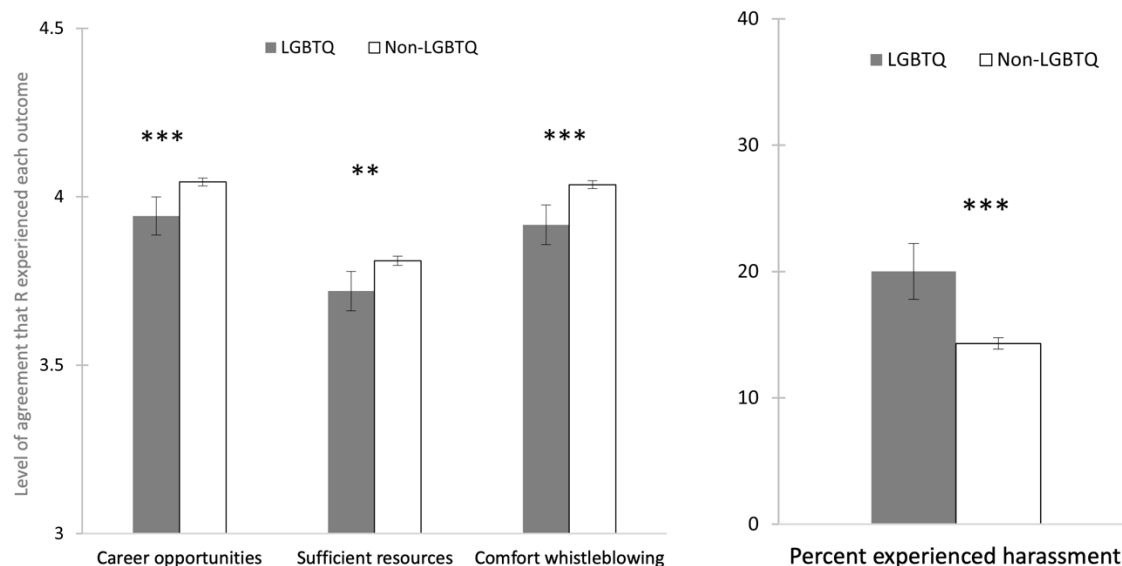
# What does the data say?

SCIENCE ADVANCES | RESEARCH ARTICLE 2021

SCIENTIFIC COMMUNITY

## Systemic inequalities for LGBTQ professionals in STEM

E. A. Cech<sup>1\*</sup> and T. J. Waidzun<sup>2</sup>



Per exemple a mi, com a persona trans, m'ha passat estar en el bany i que entre algú de la neteja i em pregunte que què faig en aqueix bany. (EG3-1)

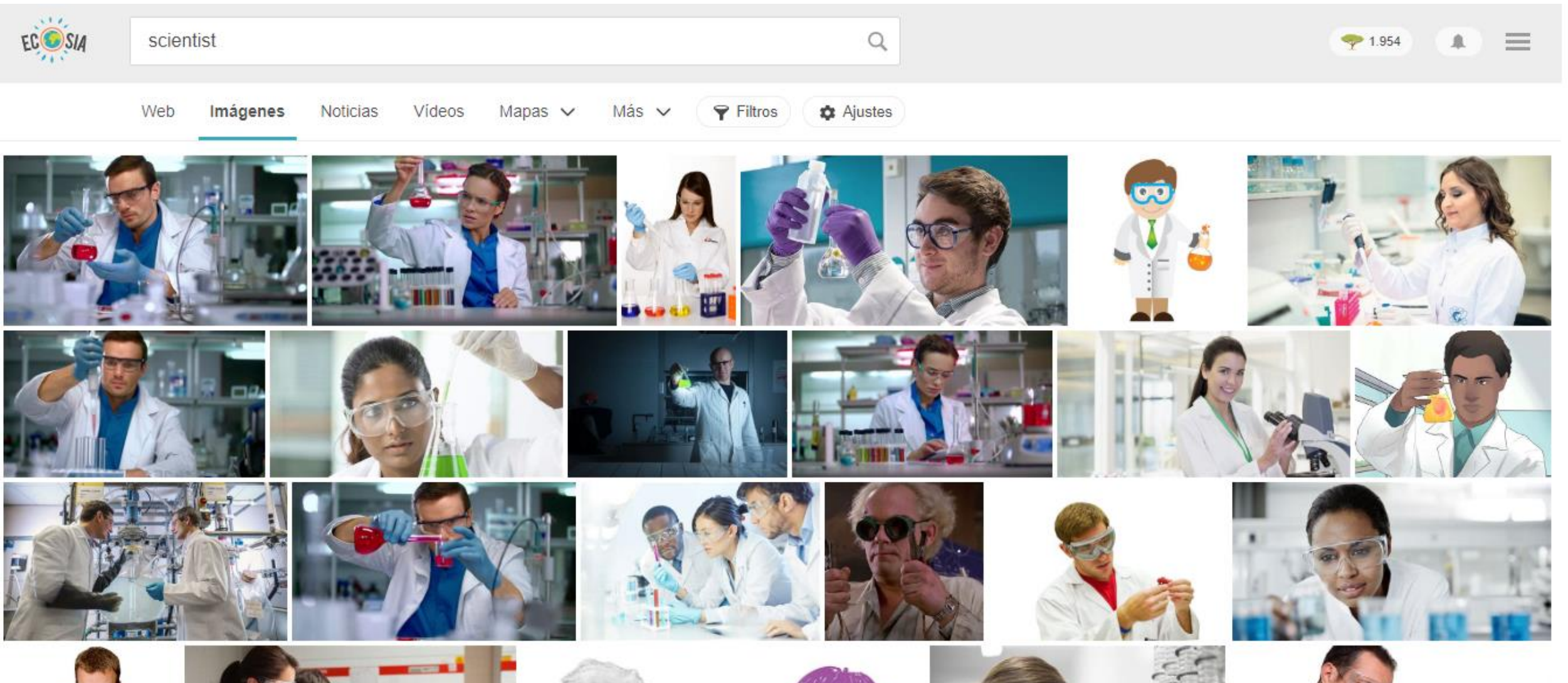
...pense que es important... que hi haja professorat visible referent... (EG3-1)

«Ai, es que ha vingut no sé qui, ¿has visto que es gay?» «Ay, mira pues esas dos son lesbianas.» Mentre eixos comentaris se continuen fent, no hi ha normalització. (EG-5-1)

«Ai, ai, eixos estàn cogiditos de la mano...», eixos comentaris continuen passant... Mientras esos comentarios existan no hay igualdad. (EG5-1)

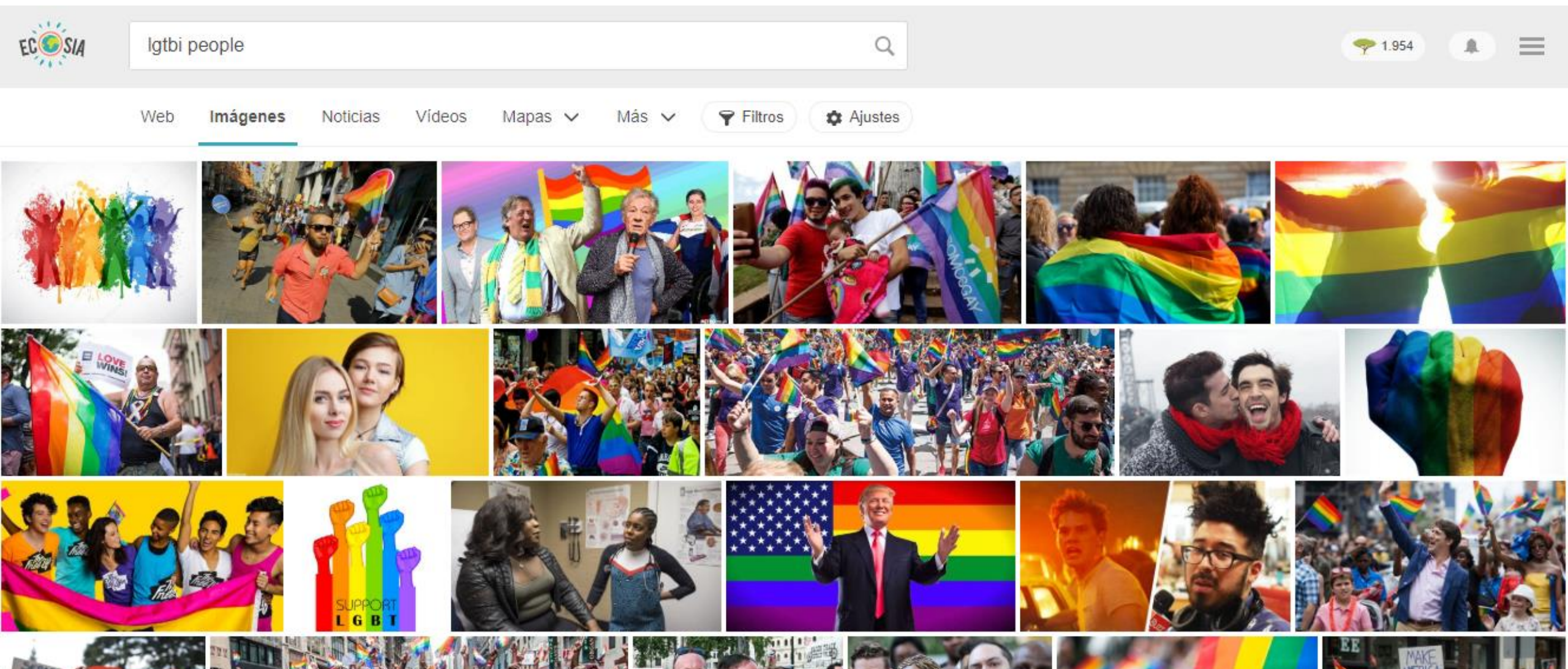
«Mira, uno de los tuyos»... ¿Míos? (EG5-1)

And why could this be?



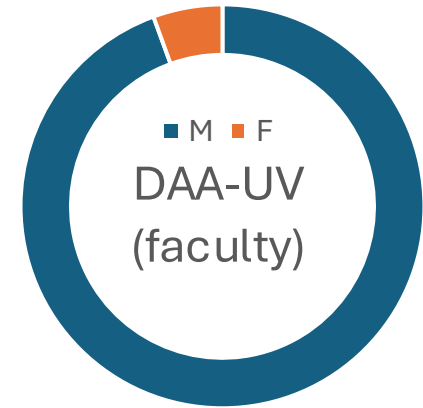


# And why could this be?



# And why could this be?

- Science as this *realm of reason*  
(you can laugh)
- Traveling for conferences
- Workplace demographics,  
power dynamics...
- 1/3 was suggested to “*act more straight*” so as “*not to complicate matters*”



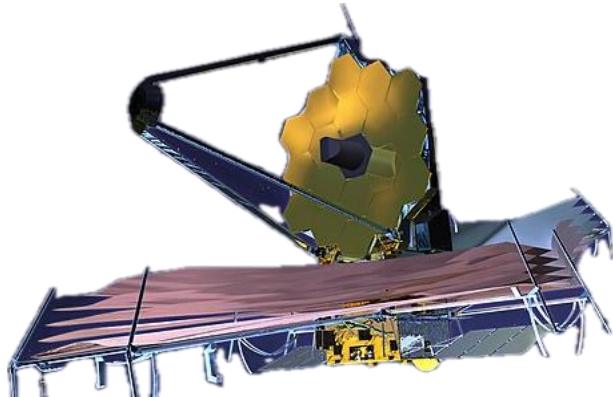
(2019)

## EXPLORING THE WORKPLACE FOR LGBT+ PHYSICAL SCIENTISTS

A report by the Institute of Physics, Royal Astronomical Society  
and Royal Society of Chemistry

# And why could this be?

- Lack of institutional commitment  
(it's not just changing the profile pic for a week a year)
- University-promoted transphobia with the excuse of “social debate”
- The “Just Wonderful Space Telescope”

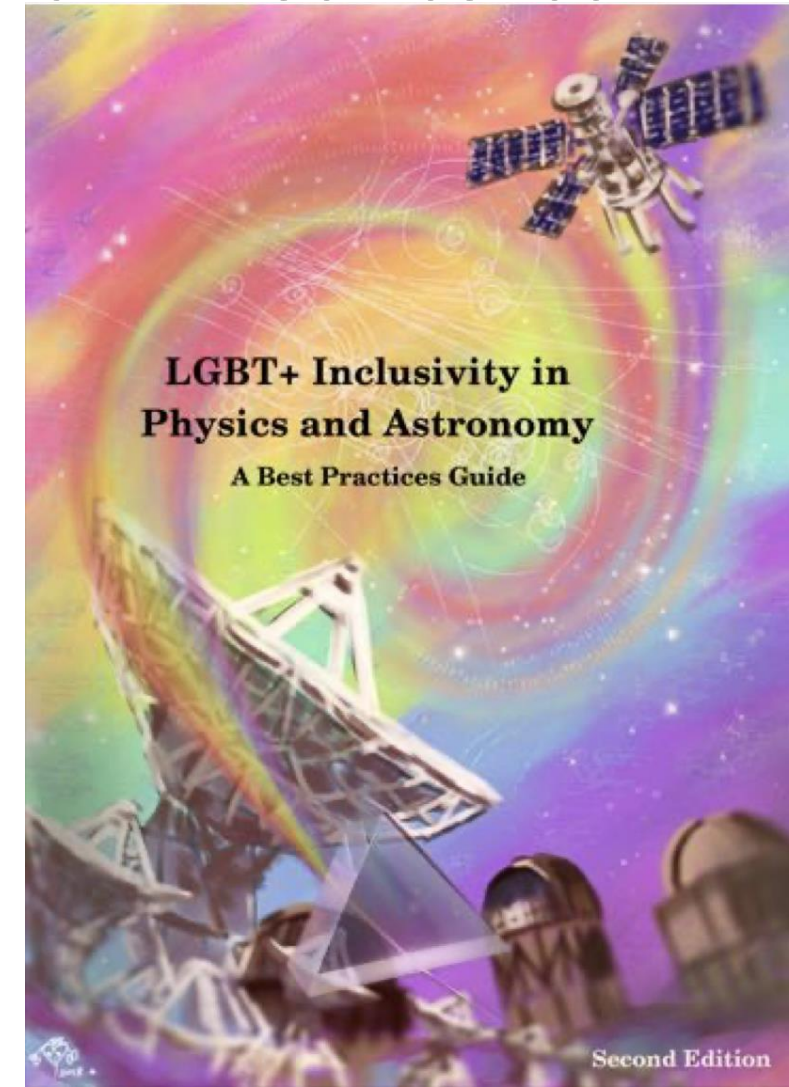




# What can be done? (in general)

*arXiv:1804.08406*

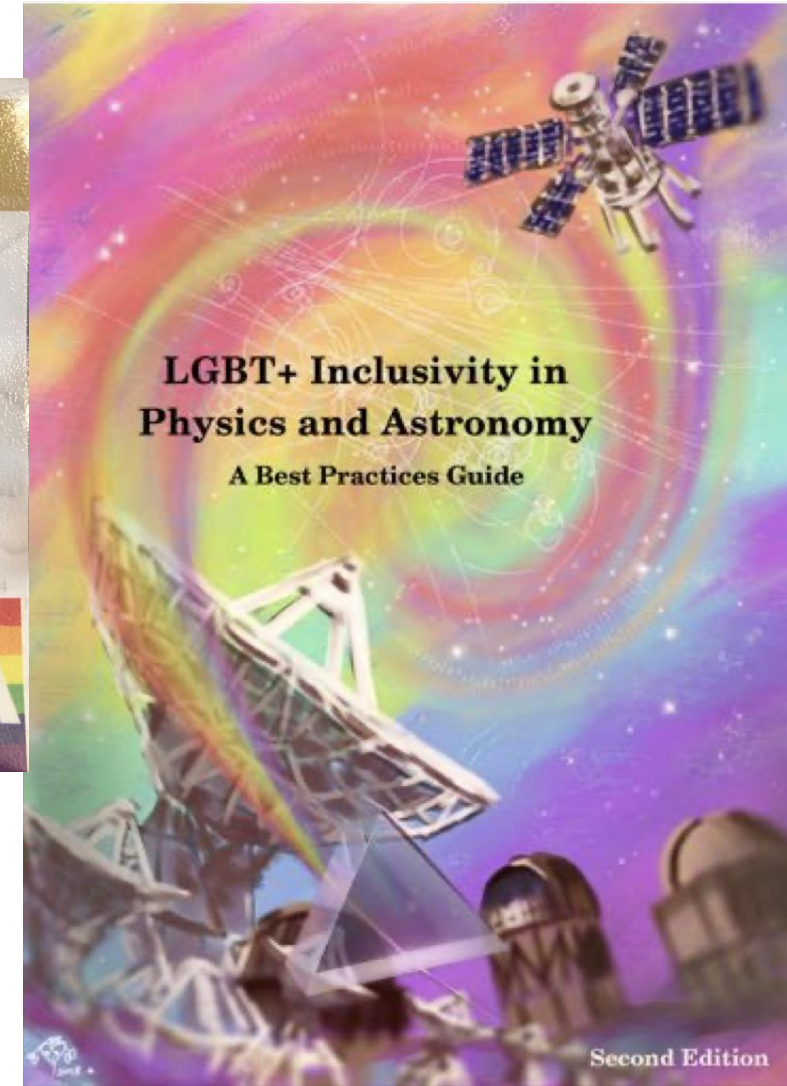
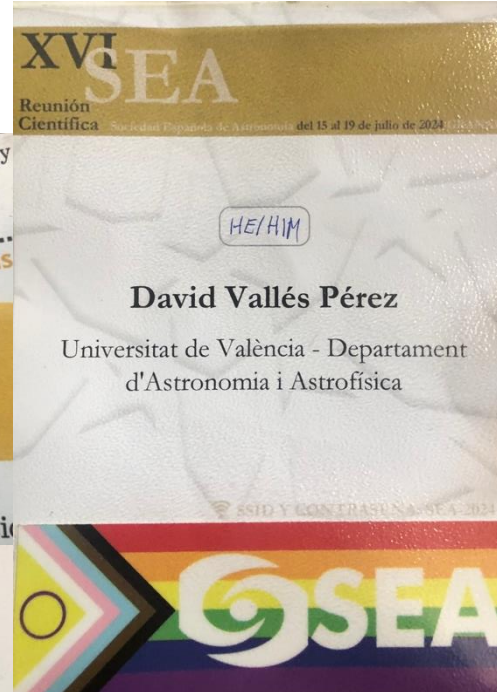
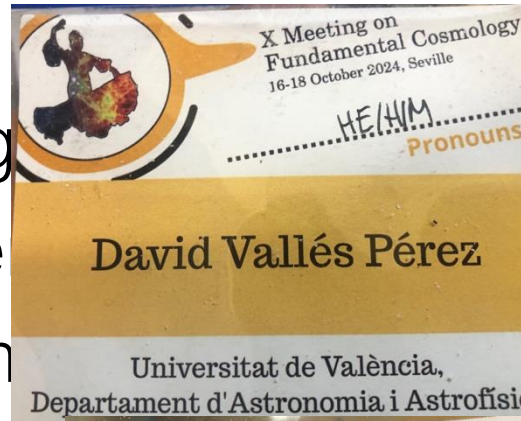
- Study the demographics
- Encourage pronoun use!!!
- Encourage (force) staff to pursue diversity training
- Inclusive language
- Protocols for internal and official name change
- If you want: promote and join “*Out Lists*”
- Diversity committees, persons of contact
- Do not tolerate offensive language, mockery, etc.
- If mentoring students: discuss climate, provide specific! non-discrimination statements, etc.
- 



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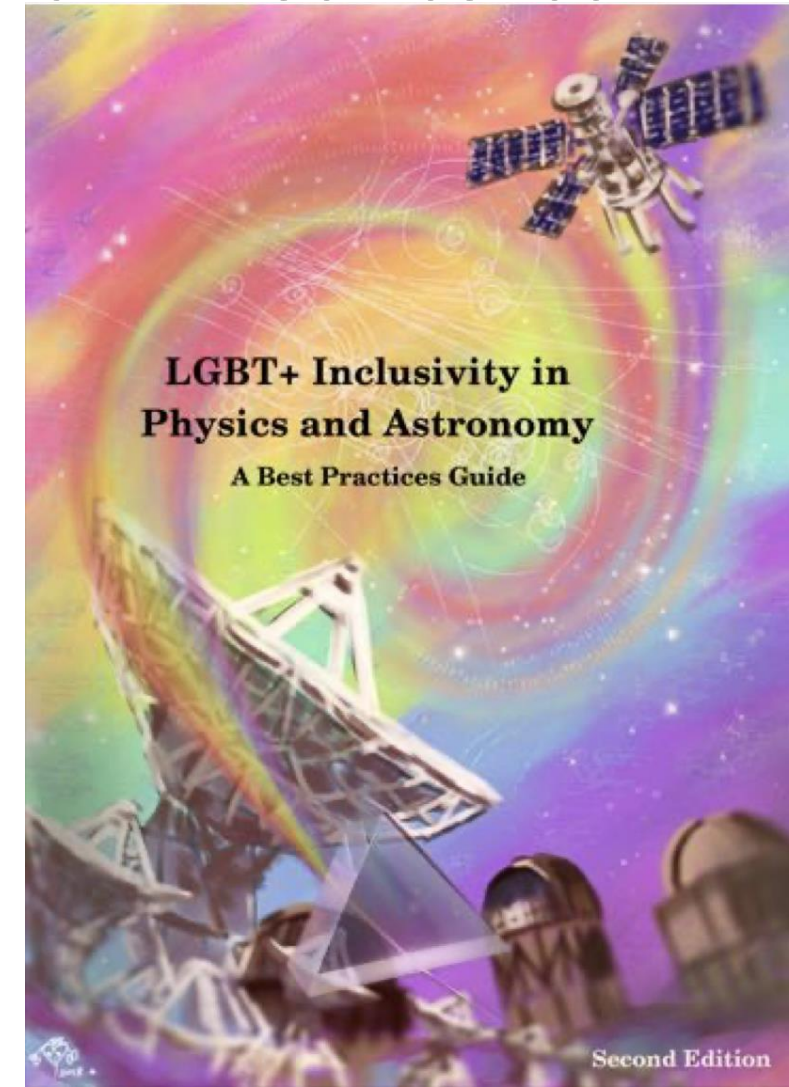




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*arXiv:1804.08406*

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# What can be done? (in general)



## 10 actions

towards LGBTQIA+ equality  
in research centres  
and STEM environments

### EDUCATION

8

Action 01 • Staff education

9

Action 02 • Outreach activities

12

### PROTECTION

14

Action 03 • Safe channels and protocols

15

Action 04 • Equality of opportunity for trans professionals

18

Action 05 • Transition protocols

21

Action 06 • Avoiding binary classifications

24

Action 07 • Rejecting pseudoscientific discourse

28

### VISIBILITY

31

Action 08 • Showcasing role models

32

Action 09 • Feminism and intersectionality

35

Action 10 • Research

38

### 10 medidas PRISMA

para la igualdad LGTBQIA+ en centros  
de investigación y entornos de Ciencia,  
Tecnología e Innovación

Para facilitar su estructuración e implementación, las 10 medidas se dividen en tres bloques, que simplifican los pilares fundamentales necesarios para lograr que las personas LGTBQIA+ puedan acceder y desarrollarse de forma plena en el entorno de la Ciencia, Tecnología e Innovación.

#### EDUCACIÓN

Los seres humanos discriminamos lo que no entendemos, por eso la educación debe ser la base de toda lucha por la igualdad. Además, disciplinas como la Ciencia, Tecnología e Innovación son una fuente de generación de conocimiento en constante conexión con el sistema educativo, por lo que incluir la educación en valores es especialmente importante. Las medidas incluidas en este bloque son:

01 Proporcionar formación al personal de los centros de Ciencia, Tecnología e Innovación en temas LGTBQIA+.

02 Apoyar la inclusividad, visibilidad e igualdad LGTBQIA+ en el sistema educativo.

#### PROTECCIÓN

La población LGTBQIA+ sale más del armario cuanto más seguros son los entornos en los que vive, mejorando así su calidad de vida, su salud mental e incluso su productividad. Por eso, es fundamental generar espacios de trabajo y estudio libres de discriminación, y proteger activamente a las personas que la sufren. Es decir, aunque la educación permite reducir la exclusión de manera preventiva, tenemos que ser capaces de reaccionar de manera efectiva y contundente cuando ocurren situaciones de discriminación. En este pilar, las medidas más importantes son:

03 Establecer canales seguros a través de los que denunciar agresiones, discriminaciones y situaciones de acoso dentro de los centros.

04 Garantizar la igualdad de oportunidades en el acceso a puestos de trabajo para las personas trans y con expresiones de género no normativas.

05 Establecer protocolos y guías para gestionar el proceso de transición de las personas trans en el ámbito laboral.

06 Evitar las clasificaciones binarias de género: creando baños inclusivos, ampliando las opciones en las casillas de género de los formularios, etc.

07 Rechazar los discursos pseudocientíficos utilizados para discriminar al colectivo LGTBQIA+.

#### VISIBILIDAD

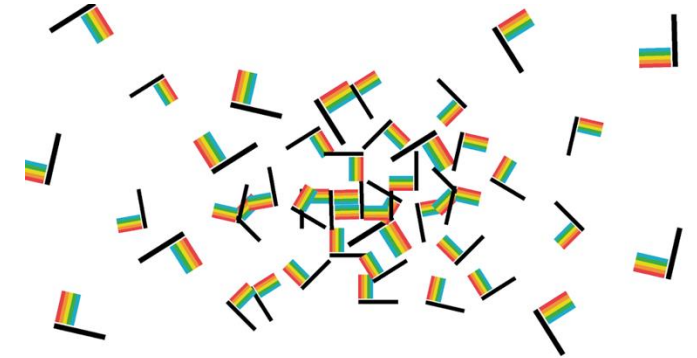
La visibilidad tanto de referentes como de las medidas que se implementan en el centro de trabajo evitará la pérdida de vocaciones entre las personas del colectivo y permitirá tener una ciencia más diversa e inclusiva, es decir, una mejor ciencia. No obstante, es muy importante que las medidas de este último pilar se lleven a cabo después de las de los dos anteriores, ya que la exposición del personal LGTBQIA+ sin un proceso institucional de mejora que garantice su seguridad, puede ser contraproducente. Las medidas más adecuadas para fomentar la visibilidad son:

08 Visibilizar referentes LGTBQIA+ en el ámbito de las CTI, así como el apoyo institucional hacia dicha comunidad.

09 Mantener una perspectiva feminista e interseccional en todas las acciones realizadas en este marco.

10 Promover la investigación y discusión de aquellos temas en CTI que atraviesan al colectivo LGTBQIA+, a través de equipos de trabajo diversos.

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### Visibilidad del colectivo LGTB+ en la ciencia

- Abierto a cualquier persona física y con un máximo de tres propuestas
- Se admite cualquier tipo de disciplina artística (fotografías, diseño, videos, ilustración, etc.)

**¡Hasta 6 premios entre 75€ y 200€!**

info: <https://anfedea.blogs.uv.es/>

Contacto:  
 Twitter: @espectrevisible  
 Correo: espectrevisible@gmail.com



# What has been done (at UV)?

[ò \_] Facultat de  
Física



First gender-inclusive restrooms  
of the Universitat!!



**LAVABO INCLUSIU** 

PER A QUALSEVOL PERSONA  
INDEPENDENTMENT DE LA SEUA  
IDENTITAT I/O EXPRESSIÓ DE GÈNERE



shout-out to the  
amazing job of  
many people at  
Facultat de Física!!



# Cosmic diversity: LGBTBQ+ inclusion in Academia

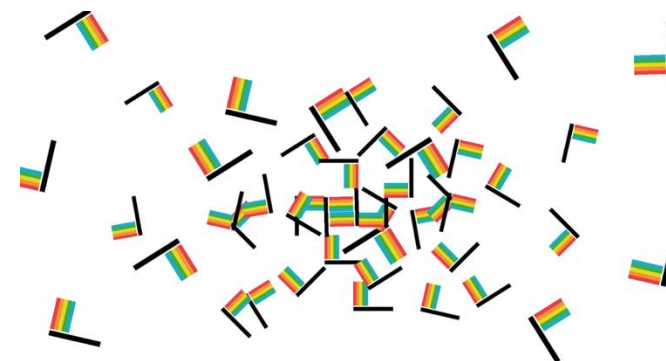
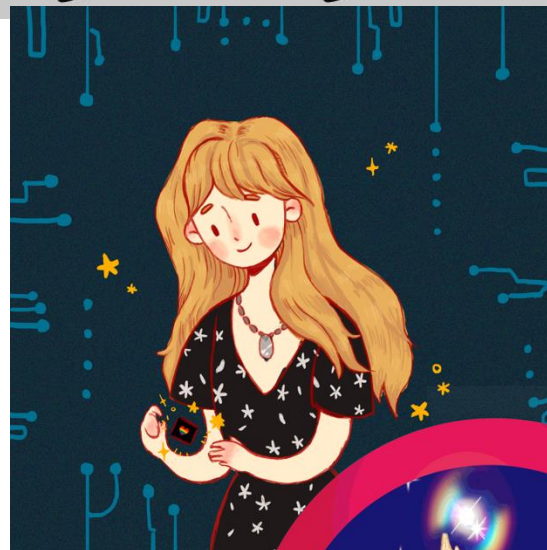
David Vallés-Pérez (*he/him*)  
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*Postdoctoral researcher*  
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*Flavourful Physics Workshop @ IFIC*  
*Paterna, Feb 3<sup>rd</sup> 2025*



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**Imprescindibile formato digital**

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Plazo: 27 de julio - 15 de octubre

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