



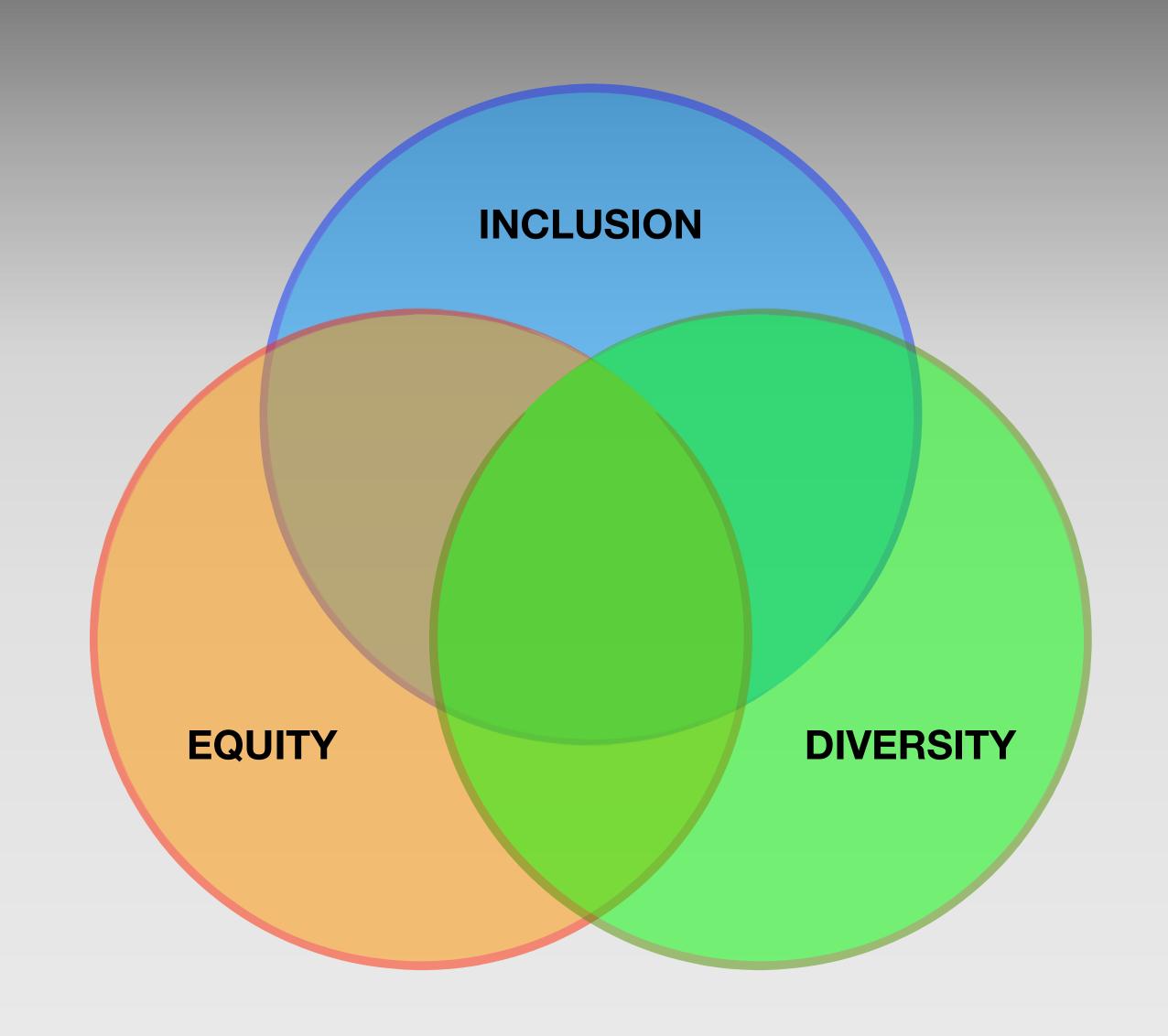
How did I get here?

- Messina, Sicily (IT): born and raised.
- Padova (IT):
 - MPhys in Astronomy and Astrophysics at Università di Padova 2009 2014
 - PhD in Galaxy formation and evolution at Università di Padova 2014 2017
 - Coming out (sort of) since 2014
- Munich (DE): studentship at ESO-Garching 2016-2017
- Paris (FR): post-doc at CEA-Saclay 2017-2019
- Durham (UK): post-doc at CEA-Durham 2019-2023
- Southampton (UK): fellowship at UoS 2023 onward!



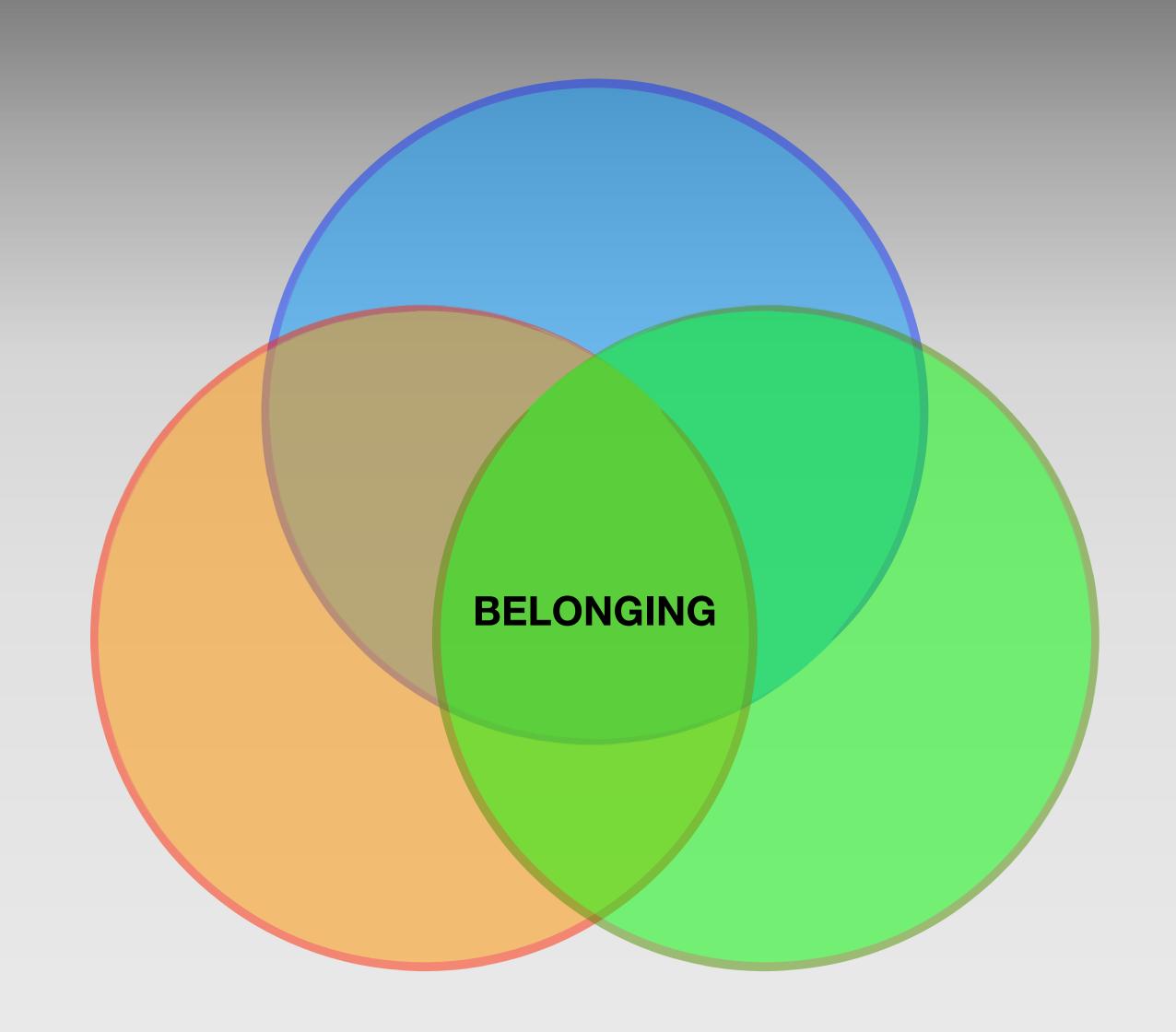
Why talking about EDI in academia

ED&I strategies are important and necessary, and they are **not sufficient** on their own.



The ultimate goal of EDI initiatives: Belonging

A society that engages with the full potential of each individuals to create an environment where everyone feels safe to express their full identities, ideas and perspectives and where views, beliefs and values are integrated.



Why talking about EDI, belonging and representation in academia?

Key role of environment and the workplace in shaping our identity



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Do we need EDI in Astronomy?

Number and gender demographics of IAU active members

AGE RANGE	Number of WOMEN	Number of MEN	% of WOMEN	% of MEN
25-30	29	28	50.9	49.1
30-35	180	307	37.0	63.0
35-40	341	591	36.6	63.4
40-45	400	880	31.3	68.8
45-50	345	958	26.5	73.5
50-55	297	1054	22.0	78.0
55-60	272	1116	19.6	80.4
60-65	213	987	17.8	82.3
65-70	170	879	16.2	83.8
70-75	128	821	13.5	86.5
75-80	105	781	11.9	88.1
80-85	66	558	10.6	89.4
85-90	25	196	11.3	88.7
90-95	5	71	6.6	93.4
95+	3	17	11.1	88.9

Source: International Astronomical Union. Data retreived on January 1st 2023

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Challenges in modern Astrophysics

Number of

MEN

28

307

591

1054

1116

987

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60-65	213		
65-70	170		
70-75			
75-80	Some		
80-85	COITIC		
85-90			
90-95	• (-)		
954			

Some discrimination and bias factors:

- Gender
- Sexual orientation
- Race
- Socioeconomic status
- Disabilities spectrum (visible and/or hidden)

% of WOMEN

50.9

37.0

36.6

26.5

22.0

19.6

17.8

% of MEN

63.0

63.4

68.8

73.5

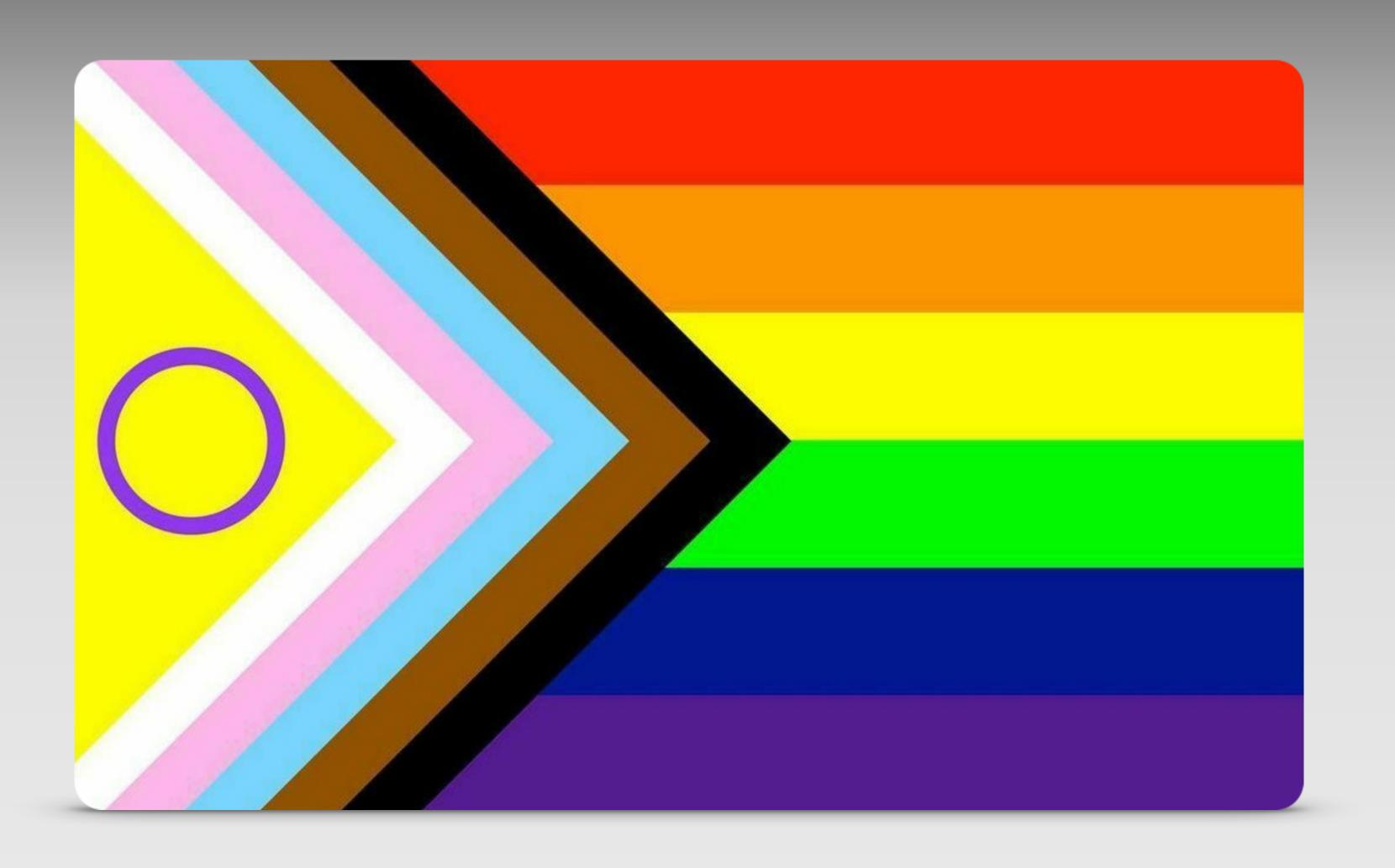
78.0

80.4

82.3

83.8

LGBTQIA+ and invisible marginalizing factors



Do we have LGBTQIA+ astronomers?

UK Astronomy and Geophysics communities

Sexual orientation

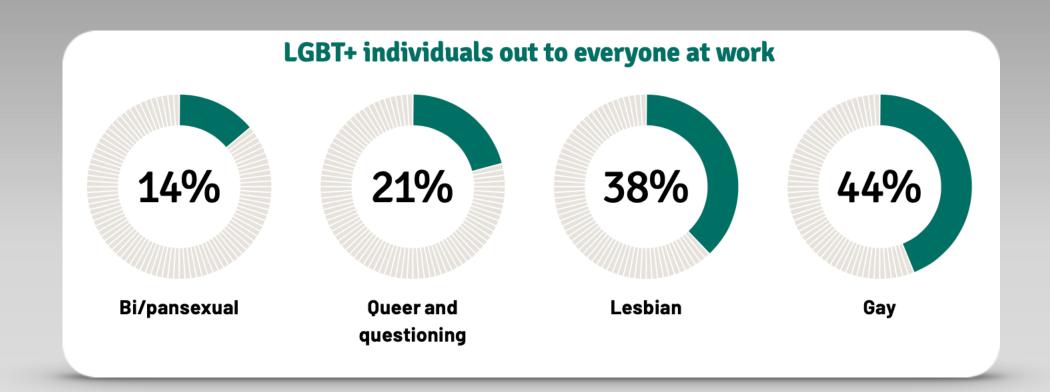
For the first time, the 2016 questionnaire asked individual respondents to indicate their sexual orientation. The results suggest that astronomers and geophysicists, particularly younger staff and students, are less likely to be exclusively heterosexual than the population as a whole. Among permanent staff, 95% of those giving this information are heterosexual, 2% are lesbian or gay and 3% are bisexual. For postdoctoral researchers the figures are 91%, 5% and 4%; and for postgraduate students 83%, 8% and 9% respectively.

The UK

included in the census, but UK Annual Population Survey data suggest 97% of the wider population identify as heterosexual or "straight", 1.8% as lesbian or gay, and 0.9% as bisexual.

Is Astronomy LGBTQIA+ friendly?

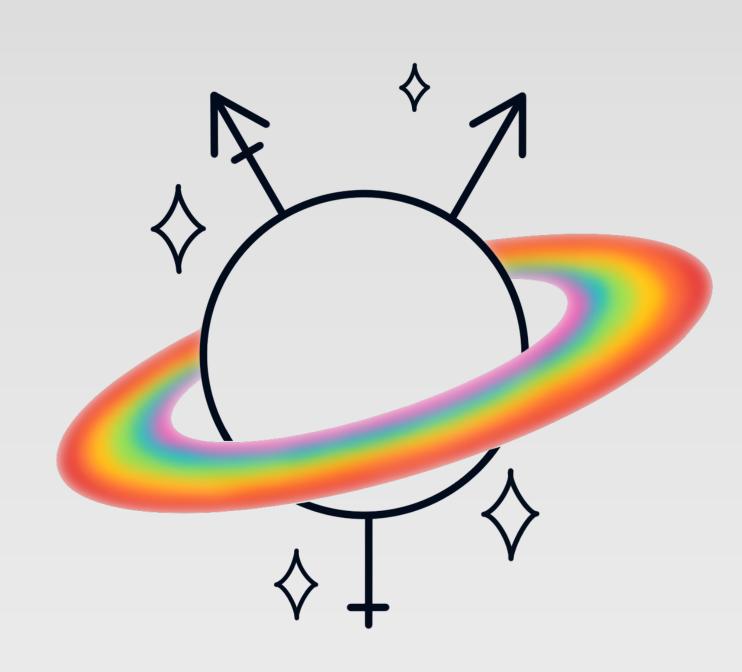
- Lack of awareness of LGBTQIA+ issues in the workplace.
- A significant number of LGBTQIA+ physical scientists had experienced or observed exclusionary behaviours, and trans people are more affected than cis.
- Uneven implementation of policies and practices.





Our role as mentors/teachers towards queer individuals

- Growing numbers of queer undergrad/PhD students
- Lots of interactions (teaching, labs, tutoring, 1:1 meetings, pastoral role)
- Prepare ourselves to:
 - Address and interact with queer individuals (e.g., correct pronouns, avoid misgendering)
 - Catch potentially dangerous situations
 - Be aware and redirect the individual to the most appropriate support service
- Why This Matters
 - LGBTQIA+ individuals more affected by mental health challenges.
 - LGBTQIA+ often comes with other marginalizing factors (e.g. neurodivergence)



Improving LGBTQIA+ inclusivity: small scales

- Local actions (discussion groups, staff networks, initiatives) are essential and most effective when emerging from the bottom-up.
- Share best practices and lesson learned within the community.
- Fellow queer astronomers, consider joining your local ones!
- Allies, please engage and support (with ads, encouragement, positive recommendation letters to organizers, funding)

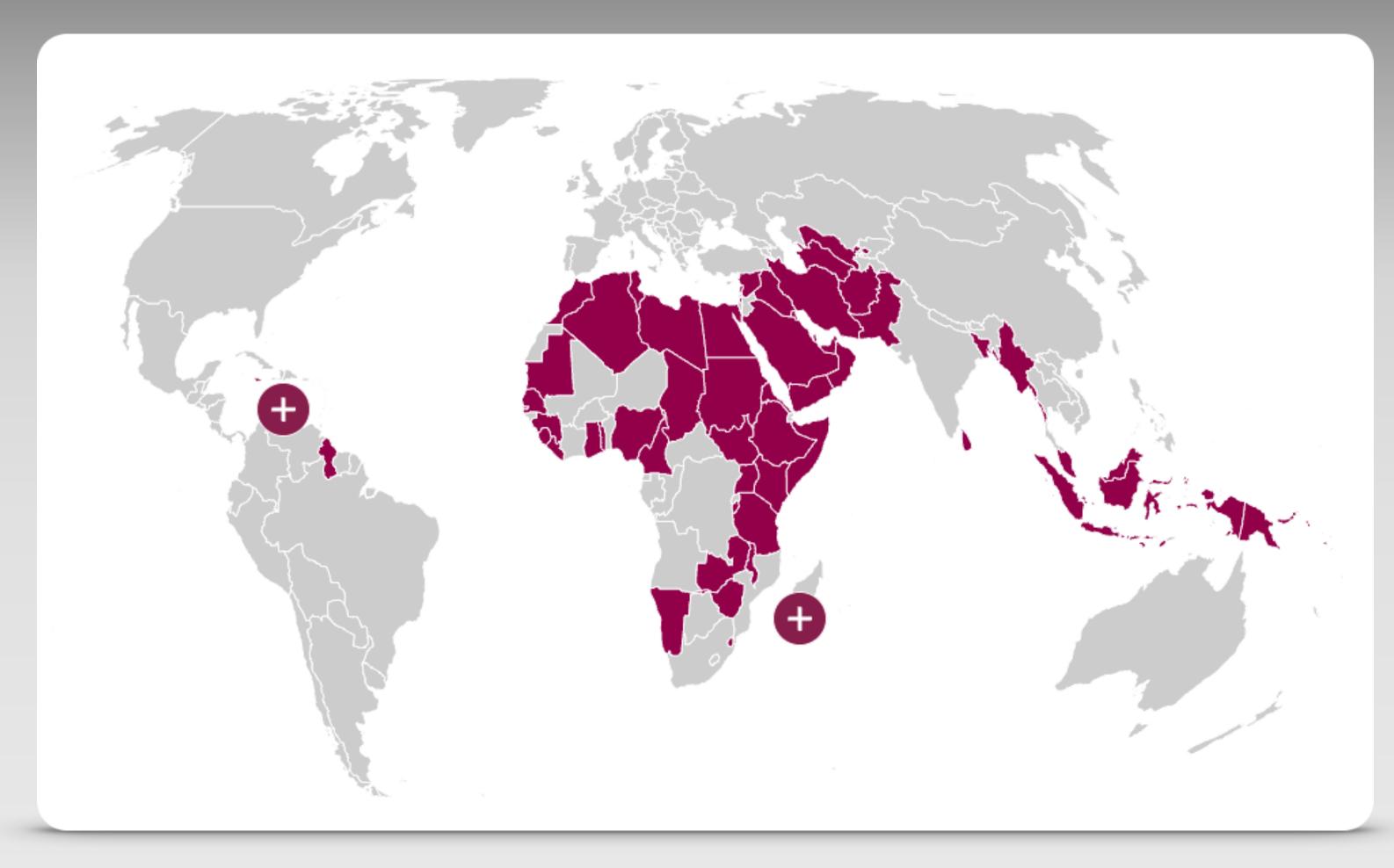






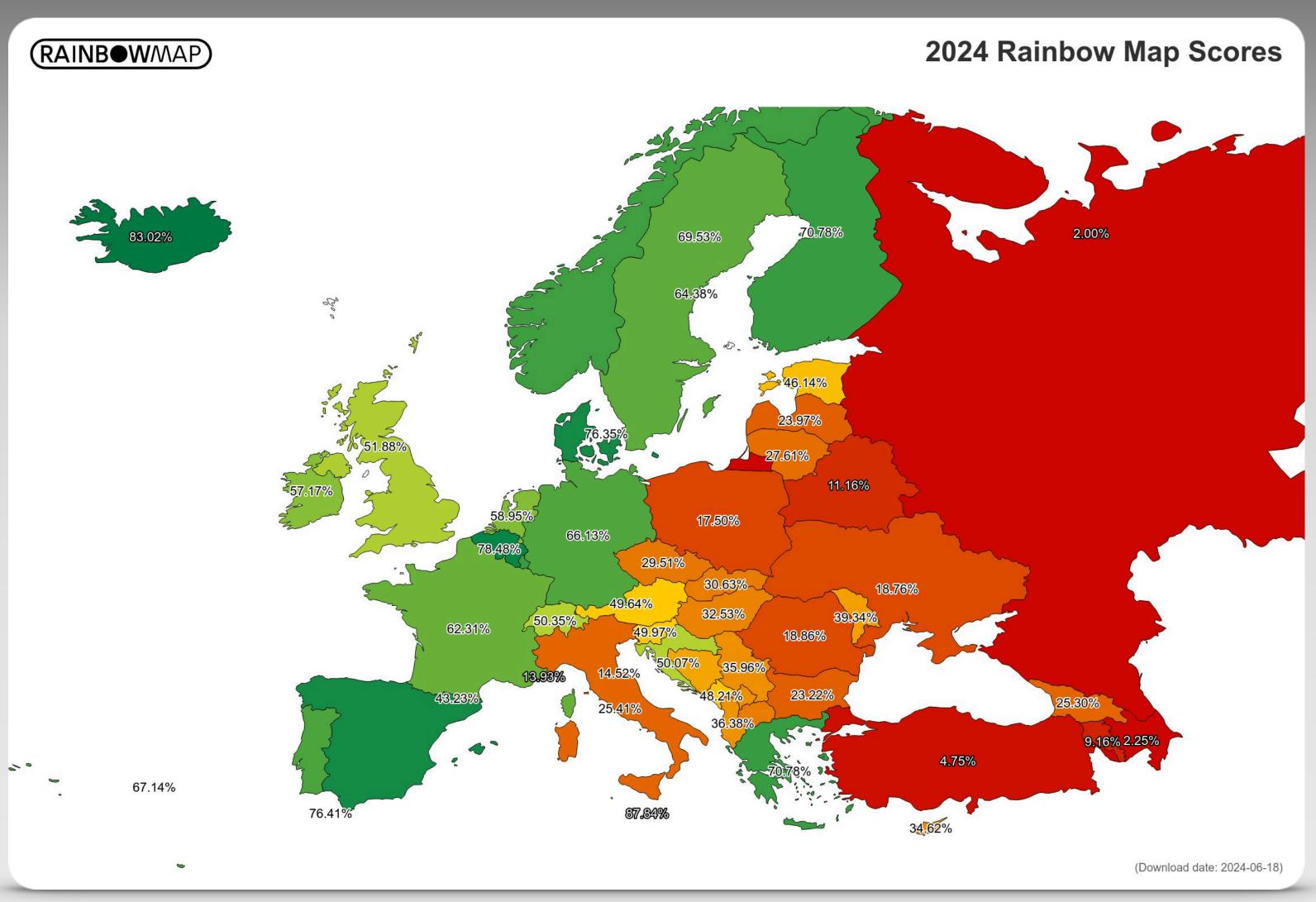
Astronomy happens in a world-wide context

- 64 jurisdictions criminalise private, consensual, same-sexual activity, and the death penalty is a possibility in 12 countries.
- 14 countries criminalise the gender identity and/or expression of trans individuals.
- Serious safety concerns associated with VISA / mobility / travel



The European landscape

- 18 countries have no legal protection of same-sex partnerships.
- 10 countries still don't have any legal or admin procedure for legal gender recognition.
- Assembly and association for LGBTQIA+ communities are restricted or under attack in at least 13 countries.



Source: ILGA Europe

Map of global scores on the basis of laws and policies that have a direct impact on LGBTI+ people's human rights.

Improving LGBTQIA+ inclusivity: intermediate scales

All the colours of the spectrum: Enhancing gender balance and LGBTQIA+ Inclusivity in Astronomy

- Invited + contributed talks
- Panel discussion
- Safe space
- Advertise and connect community activities



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Take home messages from EAS 2023

Intersectionality to understand and engage

Growing community of women and LGBTQIA+ astronomers

Leaky pipeline

We need loud and visible allies, especially in senior positions!

Create platforms, networks and safe spaces!

Improving LGBTQIA+ inclusivity: large scales

- Growing importance of large research collaborations.
- Need to ensure a fair representation of its diverse members in all its working structures, and foster a healthy and productive atmosphere:
 - Set up EDI committees at the earliest stages possible.
 - Learn lessons from positive examples (e.g. *Euclid*, Rubin/LSST).
 - Engage (or create!) EDI committees for collaborations that are important for your science.



What can we do?

Individuals:

- Be a proactive ally
- Challenge biases
- Normalise the use of pronouns
- Get curious and learn about diversities

What can we do?

Research institutions:

- Policies (e.g., support transitioning; LGBTQIA+ safeguards for travels)
- Infrastructures (e.g., gender neutral toilets)
- Recognize EDI activism in the workload
- Support career progression of individuals from marginalized categories and allies/EDI activists
- Strong response to harassment & victims protection
- Open support to the LGBTQIA+ community (eg prides)

