

# On Best Practices for the Recruitment, Retention, and Flourishing of LGBTQ+ Mathematicians

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## Introduction

Recently, more people in the mathematics community have been acknowledging something, which to many of us, is an obvious fact: mathematics is a human endeavor. That is, mathematics is done, taught, learned, researched and discovered by people. A corollary of this fact is the identities of the people who are “doing the math” is important; this idea undergirds much of the recent increased

activity of diversity, equity, and inclusion (DEI) initiatives in the mathematics community.

Included in this burgeoning awareness that the identity of who is allowed to participate fully in the mathematics community is important is the idea that lesbian, gay, bisexual, transgender, and queer inclusive (LGBTQ+) people can be mathematicians also. So, as institutions and individuals start to take their commitment to DEI more seriously, in addition to considering how to broaden participation by people whose race, ethnicity, or gender are currently underrepresented in mathematics, we also need to consider the sexual orientation and gender identity of mathematicians. The question arises: how can we in the mathematics community best support LGBTQ+ mathematicians in various aspects of their professional lives?

A first step someone can take to show their support is to familiarize themselves with current and outdated terminology. For instance, the difference between “LGBTQ” and “LGBTQ+” is the “+” signifying all of the gender identities and sexual orientations not specifically covered by the other five letters. Other current terms include “non-binary,” “deadname,” and “cisgender.” On the contrary, several terms such as “homosexual” and “sex change” are outdated and possibly offensive. We refer the reader to three excellent glossaries for more information [4, 10, 11].

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At the Joint Mathematics Meetings (JMM) in 2022, there was a panel discussion to address the question of what are the best practices for the recruitment, retention, and flourishing of LGBTQ+ mathematicians. Organized by members of Spectra, the Association for LGBTQ+ Mathematicians, the panel featured mathematicians sharing their personal recommendations for how to support transgender and nonbinary mathematicians at work, how to recruit LGBTQ+ mathematicians to your department, and how to support graduate students who identify as members of the LGBTQ+ community. This article grew out of the organization of that panel and the ensuing discussions and feedback that followed. We hope that by sharing possible answers to the questions raised by the panel in this venue, we will reach a wider audience than just those who were able to attend the JMM in 2022. After each panelist has shared their detailed contribution, brief concluding remarks will follow.

## Supporting Transgender and Nonbinary Mathematicians in the Workplace

*Keri Ann Sather-Wagstaff*

I need to start with a few disclaimers.

First, I carry a huge amount of privilege. I am a White full professor at an R1 institution. Trans people who are racially minoritized and who live on other axes of marginalization generally experience significantly more/different bias and discrimination due to their transness and other factors. And those at other types of institutions will have different experiences as well. This is not to suggest that R1 institutions are free from transphobia, far from it. But I have some privilege here within the research community.

Next, the trans and nonbinary community, like all marginalized communities, is not monolithic. This piece consists of my opinions and my experiences, and the opinions and experiences of other trans people will vary. On the other hand, while I write this from the perspective of a faculty member, much of it also applies to staff members, grad and undergrad students, and others. Overall, my point is that you should take the following suggestions in the appropriate context and not as a rulebook. In particular, none of what I write here should be construed in any way as legal advice.

The single most important thing you can do to support and affirm your trans and nonbinary colleagues is to use

their correct name and pronouns without question or hesitation. Do not deadname or misgender us; do correct anyone who does so. Do not ask us or anyone else for our deadnames; it is not information that you or anyone else needs to know unless there is a valid, legal requirement for it. Do not ask a person for information about their sex or the sex of another person.

To be clear, I use the words “name” here as others might use “lived name” or “chosen name,” and similarly for “pronouns.” It is common to call these “preferred name” and “preferred pronouns,” but that suggests that they are optional for you to use, which they are not. To deadname or misgender a trans person is transphobic, unprofessional, and inappropriate.

It can be hard for some cis people (not all cis people, of course) to understand how harmful it can be to deadname or misgender a trans/nonbinary person. It may be helpful to think about it like a professor who is addressed as Mr. or Mrs. instead of Dr. or Prof., though I recognize that not everyone understands or can fully appreciate the myriad ways that this can be harmful, especially to members of our community with other marginalized identities.

As part of using your colleagues’ names and pronouns correctly, you can work to ensure that their nametags, doorplates, email aliases and signatures, video conferencing identities (e.g., Zoom windows), and other identifying markers use their correct names and pronouns. This helps to ensure that your colleagues are not being deadnamed and/or misgendered. This includes making sure that they are able and allowed to include their pronouns in these environments. You can also share your own pronouns in your email signature, your video conferencing window, and whenever you introduce yourself. This helps to normalize the practice, so trans and nonbinary people aren’t the only ones doing it.

If you are a journal editor or involved in other aspects of publishing or reviewing scholarly texts, help your trans/nonbinary authors and editors to correct their deadnames in their past publications and publicly displayed reviews. This is becoming common practice. Many journals and publishers already have policies for this. Others that do not might be convinced to do so when they learn they might not have to reinvent the wheel.

Bathrooms. This topic is particularly challenging. Let me be absolutely clear here: trans and nonbinary people need to have access to and be able to use restrooms that match their correct gender. This is a matter of fundamental human dignity. This includes having at least one gender neutral restroom in any building where you have office or classroom space.

Have our backs if you hear someone deadnaming us, misgendering us, using transphobic slurs, or talking about

whether we pass or whether we should use another restroom. Be an ally whether we are or are not present. Tell your colleagues how inappropriate their comments and behavior are. Consider discussing the behavior with your chair, Office of Access and Equity, or other appropriate individual/office. Be mindful that your trans or nonbinary colleague may or may not want you to make a big deal about it. Consider making a plan with them before any such incident occurs.

If you accidentally misstep with your trans or nonbinary colleague, apologize quickly and move on. Do this if you deadname or misgender them or do anything flagged in this article as inappropriate or insensitive. Be careful about making a big deal about it or placing another emotional burden on the injured party when your action already caused harm.

Educate yourself. Learn about relevant institutional policies and procedures. Learn about experiences of trans and nonbinary people. Google is your friend, so you don't have to ask us to commit the extra emotional labor required to educate you ourselves. And remember that the trans and nonbinary community is not monolithic, so not everything you read will apply to each of us.

Listen to us. Don't make assumptions about us or our experiences. This includes not assuming that someone is trans or nonbinary if they have not told you they are.

If we tell you something is harming us, believe us. If we tell you that we are being harmed, we are giving you an opportunity to help retain us as colleagues and to help us flourish in the department. If you want to be an ally, tell us that you hear us and ask us how you can help. Don't tell us that our experience doesn't sound so bad, or that you or someone else had it way worse. Don't suggest that we imagined it or that we're being too sensitive. Don't try to justify or downplay the harm. Don't tell us not to take it personally. Listen actively. And don't tell us to suck it up or to just get a job somewhere else.

Respect our privacy and our boundaries. Do not ask us if we are trans or nonbinary if we have not come out to you. If we have come out to you, don't ask us about medical matters. If a trans or nonbinary person shares personal information with you about their transition (including coming out) that they're not sharing with the whole department, listen to them actively, thank them for sharing and for trusting you, and assure them that you will keep everything they tell you in the strictest confidence. Be extremely careful discussing any medical aspect of their transition with them, as such discussions can involve topics that are probably not appropriate to discuss in a professional environment or with a professional colleague. Similarly for any aspect of your colleague's sex life. Don't share any personal information about your trans or nonbinary

colleague with others without their explicit permission. Do not ask anyone else about your trans or nonbinary colleague's personal information.

## Best Practices for Recruitment of LGBTQ+ Faculty

*Amanda Folsom*

According to a 2022 Gallup poll, 7.1% of adults in the US self-identify as LGBTQ+, an all-time high, doubling the percentage recorded a decade earlier in 2012, and up from 5.6% in 2020 [7]. Among the "zoomers," the Generation Z adult population (with birth dates between ~1997–2012), a demographic cohort that encompasses most current college students, the same poll reports that one in five self-identify as LGBTQ+. The uptick in these reported statistics are likely in part reflective of increased societal acceptance of the LGBTQ+ population, but they should still be read with a grain of salt: the LGBTQ+ community is still marginalized. Moreover, these numbers almost certainly do not reflect the actual size of the LGBTQ+ population, as many in the community are not "out," meaning they choose not to publicly disclose their sexual orientation or gender identity.

What does all of this mean in terms of the work force, and in mathematics academia in particular? For one, the new generation entering the work force does so with more expectations of equality, fair treatment, and support. Current-day college students approach their undergraduate years with similar expectations (as do current graduate students). More and more employers are building explicit policy and workplace support pertaining to LGBTQ+ employees under the larger umbrella of diversity, equity, and inclusion initiatives. Below we consider several best practices for the recruitment and retention of LGBTQ+ faculty, with mathematics academia in mind. Given our publication outlet, most of our discussion is US-focused; for further international resources and rights, see for example [8, 9, 15].

*Know the Law.* Under Title VII of the Federal Civil Rights Act of 1964 in the US, federal law prohibits discrimination based on sex including sexual orientation and gender identity; as a result, LGBTQ+ people may file complaints with the Equal Employment Opportunity Commission [13]. Approximately half of US states also uphold certain additional state laws against employment discrimination based on sexual orientation and/or gender identity, though these vary in scope and protections offered [2]. Some universities and colleges also publish their own

policy regarding discrimination based on sexual orientation or gender identity (these may be found in a faculty handbook, Dean's Office website, or Office of Diversity, Equity, and Inclusion website, etc.), and many now offer explicit trainings for faculty and search committees on inclusive hiring practices, legality, DEI, implicit bias, and more. As a faculty member in a department, member of a hiring committee, or as a job seeker, it is important to approach any hiring situation with the law and explicit state and university policy in mind.

*Job Postings.* A scan of job postings for math faculty positions on <https://www.mathjobs.org> will quickly reveal many non-discrimination clauses included, such as *"We are an equal opportunity employer; all qualified applicants will receive consideration for employment."* Some current-day ads go further to include explicit phrasing such as *"...without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, . . ."* and some actively encourage such candidates to apply through wording such as *"we encourage potential candidates from underrepresented and/or historically excluded groups to apply"* or *"...including, but not limited to, racial and ethnic minorities, women, members of the LGBTQ+ community, persons with disabilities, persons from lower-income background and first-generation college graduates."* Even a single sentence in a job ad making explicit reference to anti-discrimination, tolerance, and support for LGBTQ+ candidates can go a long way, and send signals of inclusivity to the candidate at the earliest stage of the math job application process. Conversely, with more and more universities making such explicit references in jobs ads these days, omitting such a sentence may send a negative signal to math-job-seeking members of the LGBTQ+ community.

A job ad can also be an opportunity for departments to make mention to a diverse student population, including LGBTQ+ students, and a new faculty member's role in this regard, e.g. *"we serve a diverse undergraduate and graduate student population, and are interested in applicants with a record of successful teaching and mentoring of students from all backgrounds, including first-generation college students, low-income students, racial and ethnic minorities, women, LGBTQ+, etc., and who have a demonstrated ability to contribute to undergraduate diversity initiatives in STEM."*

While <https://www.mathjobs.org> is a major outlet for academic jobs in mathematics, it is not the be-all and end-all. Departments should consider advertising open positions more broadly, for reasons including more potential diversity in their recruitment efforts. To this end, some additional job ad outlets to consider include Spectra, the Association for LGBTQ+ Mathematicians, the Association for Women in Mathematics (AWM), and the National Organization of Mathematicians (NAM), which promotes

and supports research in the mathematical sciences, especially for underrepresented minorities.

*The Interview.* At any point during the recruitment process, it is currently illegal (in violation of Title VII) for those doing the hiring to ask questions that force a candidate to reveal personal information such as sexual orientation, marital status, age, citizenship, and more. This is important for both the interviewing department and job candidate to know. Interviewers should not assume a person's pronouns (e.g., they/their, she/her, he/his) and should in general be mindful of what is said during casual conversations; the candidate is interviewing the departments in a sense, too. Interviewers should let the candidate lead any conversation about their gender identity or sexual orientation, which they may choose not to discuss at all, and interviewers should not pry if the candidate voluntarily opens up. In case a faculty interviewee chooses to come out at any point before, during, or after the interview, it could be helpful for the search committee members to have thought through in advance how they would respond in the moment, to show support and community—and even better, to actively indicate interest in recruiting and retaining diverse faculty. When setting up an interview schedule, if time permits, hiring departments may consider asking candidates if they would like to request optional appointments with a campus group or person of their choosing; this open-ended invitation could allow a candidate to talk to others on campus about LGBTQ+ culture or issues, without any presumption on the part of the search committee.

*In the Department and on Campus.* In addition to a job ad potentially sending signals of tolerance, support, and welcoming, department-specific websites can do the same. For example, a department may choose to include a DEI sub-page which makes specific reference to the LGBTQ+ community in some way, or links to relevant campus resources such as a Queer Resource Center, or LGBTQ+ faculty groups. Physical signage on campus and in departments can go a long way, too. *"One of the first initiatives of these groups was to hang a permanent pride banner outside the university center... an openly gay faculty member told the group that this is what convinced them to come to Adelphi [6]."* The AMS and Spectra have recently partnered to produce posters highlighting LGBTQ+ mathematicians, and campus Queer Resource Centers typically have free "swag" to hand out such as "LGBTQ+ Safe Space" or "Ally" stickers – a gesture as small as getting a hold of these free materials and hanging them around the department or outside your office is meaningful.

*Retention and Recruitment.* Kerry Ann Rockquemore, author, speaker, and academic in the field of faculty development and leadership, bluntly tells us *"For a Diverse Faculty, Start With Retention"* [3]. We leave you, reader, with Kerry's

five important questions to consider regarding retention and recruitment of LGBTQ+ faculty and diversity in hiring more broadly:

1. Do you really know why faculty members have left your department?
2. Have you asked current faculty members if they have what they need to succeed?
3. Is a structure in place to support newly recruited faculty members?
4. Is there an ugly reality that nobody wants to face?
5. Are you actually behaving like an ally in your department?

## Supporting LGBTQ+ Graduate Students

*Joseph Nakao*

A student's success in graduate school can heavily depend on whether or not they feel safe, supported, and part of a community. There are already countless stressors that cause anxiety throughout graduate school such as coursework, research, finances, and one's personal life. Yet, departments seldom consider the struggles of being LGBTQ+. The challenges LGBTQ+ students face are constant and everywhere. From not being addressed by one's pronouns, to being blatantly discriminated on the street, to being one of a few out LGBTQ+ individuals in a department, all these instances take an immense toll on a student's mental health. Before moving forward, I acknowledge that facing challenges because of one's identity is not unique to LGBTQ+ individuals and applies to all marginalized groups.

*What can departments do?* Many of the topics addressed in the other sections of this article also apply to graduate students. The purpose of this section is to focus specifically on graduate students. As mathematicians, we understand the importance of stating assumptions before stating results. A department's desire to increase their commitment to diversity, equity, and inclusion follows a similar structure. Before discussing ways to improve DEI, a department should first assume a position of humility and an honest willingness to change. Talking about improving DEI is the "easy" part; taking action and following through on your word is the "hard" part. Without this mindset, a department will be unable to fully support their graduate students.

I believe there are two indicators of a department's support of LGBTQ+ graduate students: (1) the level of friendliness and thoughtfulness within a department, and (2) the promotion and representation of LGBTQ+

mathematicians. I have found that building a departmental atmosphere of thoughtfulness and friendliness allows LGBTQ+ inclusivity to flourish. A graduate student's department should serve as an oasis within a university and town/city. Their department should make them feel welcome, respected, and safe. LGBTQ+ students want to feel included without fear of judgment. Simply interacting with faculty and students who are thoughtful and express interest in knowing you can significantly reduce anxiety. I encourage faculty and other students to occasionally take a stroll past student offices/cubicles and check in on how their classes and research are going. This is a small yet personal example that can help with the first indicator.

As with most things in life, communication is key. More importantly, it's the students' opinions that matter! This cannot be overstated. Students need to feel comfortable sharing their concerns with the department, and they need to have confidence that their concerns will be addressed. Hence my emphasis on working to build a feeling of openness and camaraderie between faculty and students. I have found that when students feel more connected with their department, conversations on DEI come naturally. However, I want to note that departments should clearly prefac any communication with a disclaimer that they might be required to report certain conversations. Another idea to help spur communication and trust between faculty and students is to have a graduate student representative on the graduate studies committee. Having a graduate student elaborate and point out concerns students have can also develop trust between both bodies. But, it is imperative that the faculty take the concerns raised with seriousness and are willing to work with students to resolve the issues.

Another idea is to host weekly meetings between all instructors and TAs to discuss the previous week's discussions/labs. (This could be broken down by course, e.g., all instructors and TAs for Calculus III meet). In general, the TAs take turns talking about their sessions: what went well, what went poorly, and any situations that they need guidance on. For example, perhaps a student started getting visibly upset because they struggled to understand a problem that everybody else seemingly understood. Dealing with these sensitive student situations requires experience, patience, and no small amount of empathy. The instructors and TAs then bounce ideas in a Socratic manner. Although topics of DEI might not be a talking point each week, these weekly conversations increase trust. The level of friendliness and thoughtfulness within a department between faculty and students will follow naturally from these more personal situations.

Ideally, a department should have widespread minority representation, including LGBTQ+ faculty and graduate students. This is not always the case. Nonetheless, a

department can still stay current on articles, conferences, and workshops that highlight LGBTQ+ mathematicians. Places to look include: LGBTQ+ specific minisymposia and panels, conference/workshops listings on the websites of the major mathematical societies, and the Spectra newsletter. Encouraging students to read these articles and attend these events, even if you and the student do not identify as LGBTQ+, goes a long way in showing your support for LGBTQ+ mathematicians. I believe it is incredibly beneficial for graduate students to see other successful LGBTQ+ mathematicians. This exposes students to similar and relatable mathematicians that they can look up to.

LGBTQ+ graduate students face a wide range of challenges, and mathematics departments have a role to play in providing a safe and supportive atmosphere. By encouraging a thoughtful departmental atmosphere and promoting LGBTQ+ mathematicians, departments can create a more supportive environment for their LGBTQ+ graduate students. Ultimately, the graduate students are the people to listen to, and I encourage departments to facilitate discussion between faculty and students to open up communication.

## Concluding Remarks

These three contributions have described several actions that departments and faculty members can take (and avoid) to support transgender and nonbinary colleagues, as well as to recruit and retain LGBTQ+ faculty and graduate students. The suggestions contained herein will go a long way toward building a more inclusive department, and a more inclusive mathematics community as a whole.

But it is important to remember that these are just three contributions from a large and diverse community. As these panelists mention, mathematicians from underrepresented groups who also identify as LGBTQ+ face intersecting layers of prejudice and discrimination. Fortunately, treating all individuals with respect, recognizing and celebrating everyone's diverse backgrounds, and reflecting on the ideas and suggestions in this article can go a long way to creating a professional mathematics community welcoming to all, especially those of us in the LGBTQ+ community.

If you are interested in supporting the LGBTQ+ mathematical community, please consider joining Spectra, the Association for LGBTQ+ Mathematicians. Spectra regularly provides programming at the Joint Math Meetings, including the plenary Lavender Lecture, as well as panels like the one detailed here, and has held a social reception at every JMM since 1996. We also organized an online research conference hosted by The Institute for

Computational and Experimental Research in Mathematics (ICERM) for LGBTQ+ mathematicians in 2021 [14], and are planning the next one as of this writing. For more information, please consult other articles in the *Notices* such as [1], chapter contributions such as [5], or Spectra's website [12].

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