

## DEI statement - Michael Hott

I understand inclusion as making a space accessible and welcoming to everyone interested, regardless of their intersectional identity and personal background. Diversity and inclusion to me mean actively encouraging students from underrepresented intersectional identities to join the respective space. To me, mathematics is a great discipline that is easily shared with everyone, as it, in many cases, only requires a piece of paper and a pencil, and sometimes not even that. It is a universal language spoken and understood by every culture.

While I have also struggled in my past with receiving support and accommodations when I needed it, I have highly benefited from individual support at multiple stages throughout my career. I acknowledge that without that crucial support, I might not have succeeded thus far. I have witnessed family, friends and colleagues being denied equal support and struggle with discrimination instead, having them generally face more hardship in accomplishing their individual goals. For example, my younger sister who had very comparable grades to mine was required to provide an IQ test to skip a grade in high-school, while I was offered that opportunity without having to 'prove myself', which I now understand as implicit bias and stereotype threat against women. Another sister of mine who is black faced even more discrimination, as she was aware that she was being perceived as less intelligent despite her constant efforts to prove others otherwise. A part of inclusion for me thus means to help students remove those obstructive mindsets stemming from cultural and systemic discrimination. It is important to guide them towards focusing on achieving their personal goals instead of on trying to prove that they deserve to pursue those goals.

**Teaching:** UT Austin is required by Texas law to admit eligible Texas students in the top 6% of their high school graduating class across all of Texas. This allows students from schools with very different levels of preparation to attend UT. In my classes, I focus on an individualized learning experience, where students are encouraged to stop me whenever they struggle following. I remind my students that they are not the only ones struggling with any of the concepts, that the concepts are hard but worth learning, and that the entire class benefits from having a concept explained in different ways and from different perspectives. I encourage students to come see me in my office hours, so that they can ask questions in more detail, and if they require further assistance beyond the class, I guide them towards additional resources. This helps students get a better perspective on their understanding, and how they can improve or continue their efforts.

In class, I remind students that progress in the sciences has been made possible by many contributions from all cultures across the history of mankind. I believe it is important to highlight mathematical contributions often omitted in traditional textbooks, e.g., by African and Indian mathematicians, see, e.g., [2].

Personally, I have greatly benefited from interacting with peers from different cultural and national backgrounds. In my classes, I believe that students benefit from mixing groups and having their roles of reporter and recorder be regularly switched. It helps reduce possible biases as well as it increases confidence in working with others. I think it is a good practice to have students to come up with behavioral rules to establish a friendly and inclusive class environment, and regularly check in with all students on how well those rules have been adhered to. I believe it is important to continuously engage in conversations about how to

improve our teaching and how to establish a friendlier and more nurturing environment for everyone.

**Service:** I have participated at our *Saturday Morning Math* program, where graduate students and some faculty gather local mid and high school students to present intriguing math problems. There, students get the opportunity to get individual guidance from graduate students on how to approach problems exceeding the school curriculum. Through this program, I have gotten to meet very motivated young students, even the shy ones. This program is great to show kids and young adults that math is about solving difficult problems, and that they belong in the scientific community, if they choose to pursue such a career.

**Mentoring:** I have been a mentor at the *Directed Reading Program* (DRP), a program offered by UT Austin's math department to undergrad students, in which they get to read with a graduate student. This program has allowed me to work with students from diverse backgrounds, and I have learned how to guide motivated students to learn the rigor of mathematics, in some cases even towards current research. The program is set up to have a student read on an agreed upon topic or book and then present that in the following meeting. At the end of the semester, they get to present what they read in a symposium among DRP participants. My last student Ethan Jana is currently applying for grad schools for mathematics.

**Education on discrimination:** I have been actively learning more about discrimination against the Black and the Southeast-Asian community within the US and across the globe by attending courses offered through the Division of Diversity and Community Engagement at UT Austin, as well as by attending conferences highlighting and empowering excellent Black Mathematicians. I have also frequently been attending events organized by our local AWM chapter, engaging in conversations with female undergrad mathematicians about mathematics and how to broaden access and how to make mathematics more welcoming to female students.

I believe it is crucial to participate in existing programs uplifting and promoting excellence in underrepresented identity groups as well as neglected communities. I am also interested in helping establish new initiatives and outreach programs. Finally, I want to engage in conversations in how to improve access for everyone to higher education and how to create spaces where everyone can feel welcome and thrive.

## References

- [1] Center for research on learning & teaching, University of Michigan, *Inclusive Teaching Resources & Strategies*, <https://crlt.umich.edu/multicultural-teaching/inclusive-teaching-strategies>
- [2] E. Robertson, J. O'Connor, *MacTutor*, <https://mathshistory.st-andrews.ac.uk/>