Gender Equity in the Mathematical Sciences

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KRISTINE BAUER, OZGUR YILMAZ AND DEANNA NEEDELL, Pacific Institute for the Mathematical Sciences

Strategies for building inclusivity: lessons from PIMS initiatives

The mathematical sciences aspire to be an inclusive discipline, yet underrepresentation across many dimensions of diversity remains a persistent challenge. Achieving greater diversity is essential: a wide range of perspectives has been shown to strengthen problem-solving, enrich research directions, and improve the resilience of scientific communities. While many factors contribute to persistent inequities, this talk will focus on two areas where concrete progress is possible: reducing bias in the review of research proposals and fostering programs that actively support participation from underrepresented groups. The discussion will draw on our experience directing initiatives at the Pacific Institute for the Mathematical Sciences (PIMS), highlighting both successful strategies and ongoing challenges in building a more inclusive mathematical community.

ZACK CRAMER, University of Waterloo

Out in the Open: Fostering 2SLGBTQIA+ Inclusion in Mathematics

We all teach 2SLGBTQIA+ students, whether we know it or not. Yet undergraduate mathematics classrooms often remain silent on issues of gender and sexual diversity. In this talk, I argue that visible, intentional acts of openness and support can meaningfully shift that dynamic. Whether it's being proudly visible as a 2SLGBTQIA+ ally or speaking openly about one's own identity, even small gestures can help create a classroom where students feel safer and more seen.

As a gay math professor, I'll share what it was like to come out to my students and the unexpected ways it transformed our learning environment. I'll offer practical strategies for instructors, regardless of their identity, to create more inclusive and affirming learning spaces for 2SLGBTQIA+ students. Together, we'll consider what it means to create a math classroom where all students feel safe to be themselves.

KSENIYA GARASCHUK,

Human-centered classrooms

In this talk, we explore ways in which EDI can meaningfully inhabit the teaching of mathematics, not as an add-on but rather as part of the discipline. We discuss the influence of values, identities and lived experiences in the classroom, along with the role of flexibility and representation in supporting meaningful learning. We use mathematical examples to illustrate how rigorous content can be culturally and humanly situated.

ERICA LIU, University of Waterloo

Empowerment in Math Happens Through Doing Math Together

When people hear Women in Math, their first thought is often gender equity — but WiM is not only about gender; it is fundamentally about mathematics. Our mission has always been to build a community where research, collaboration, and inclusion reinforce one another.

This philosophy shapes the initiatives we lead: the Ontario Graduate Mathematics Conference, the Directed Reading/Research Program, and the Dean's Distinguished Lecture Series. These programs invite students to propose projects, write research plans, and explore topics ranging from number theory to life contingencies. They are not simply outreach events — they are opportunities for students to think, write, present, and discover mathematics in meaningful, rigorous ways.

People sometimes ask why WiM organizes research events for such a broad audience. Yu-Ru always responds: Why not?

Gender equity in mathematics isn't about drawing boundaries — it's about opening doors, creating equitable intellectual spaces. Empowerment in mathematics doesn't just happen through discussion — it happens through doing math together.

ERIN MEGER, Queen's University
Expanding Horizons: Applying Lessons from Women's Advocacy to Intersectional Equity

Equity efforts in the mathematical sciences have long focused on supporting women, and these initiatives have produced meaningful progress. While many patches have been applied to the "leaky pipeline" for women, it is clear that significant leaks persist for other communities. When we examine the experiences of Indigenous scholars, Black students, queer mathematicians, and others from equity-deserving groups, the causes and consequences of these leaks shift depending on the intersections of gender, race, culture, and systemic barriers; the leaky pipeline needs solutions as diverse as the communities it impacts.

This talk explores how lessons learned from gender-focused initiatives can inform a more intersectional approach to equity. I highlight how Indigenous knowledge systems can inform our understanding of assessment, and how Black student perspectives reveal gaps in gender-only frameworks. I will also provide concrete, actionable strategies for classrooms and research labs that create conditions where all students no matter their intersectional identities can thrive.

MALABIKA PRAMANIK, UBC & BIRS
Creating Space: Evolving standards of Gender Equity and Collective Change in the Mathematical Sciences

Gender equity requires more than representation. It calls for sustained change in how our community defines excellence, opportunity, and belonging. Drawing on experiences from the Banff International Research Station (BIRS) and other national and international initiatives, this talk reflects on the evolving standards of gender equity and the ways they intersect with race, geography, and institutional culture. I will discuss lessons learned from the last five years of BIRS experience, the limits of traditional EDI metrics, and the importance of intentional mentorship, transparency, and accountability in shaping inclusive research spaces.

EMILY QUESADA-HERRERA, University of Lethbridge
Math as a neurodivergent trans latina

Reflections on gender, community, intersectionality and identity

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KYNE SANTOS, Toronto Metropolitan University

ILA VARMA, University of Toronto
Concrete strategies for promoting Gender Equity in your mathematical spaces

I will discuss some of the concrete strategies I have used for promoting Gender Equity in the mathematical spaces I am a part of. I will also discuss the pushback one might encounter with promoting such strategies, anything I've learned about getting around them, and time permitting, open up the discussion to the audience to add onto the list of concrete strategies. The goal of this talk is to leave audience members with doable and immediate next steps that can be improved upon year after year.

AMY WIEBE, University of British Columbia Okanagan
Curbs, Not Tickets: Conference Planning for Equity

While there has been great improvement over the years in attempts to have more diverse representation in conference plenaries and session speakers, there are many other aspects of conference planning that contribute to an inclusive environment that are often neglected. In this talk, we highlight some questions for organizers to consider, and discuss specific conference examples

where appropriate, when trying to plan more equitable conferences. We emphasize a *proactive* approach to equity concerns rather than a *reactive* one.