Juliette Bruce's Diversity Statement

I. Introduction. I believe strongly in the importance of inclusivity, diversity, and justice, and I am passionate about promoting these values within the mathematical community. As a graduate student at the University of Wisconsin-Madison I worked hard to create a learning community that was as open and inclusive to as many people as possible. By working with outreach programs like the Madison Math Circle I expanded the reach of the university outside the bounds of campus. While on campus I have made our learning community more inclusive and welcoming of people from underrepresented groups; especially LGBTQ+ individuals through work on the Mathematics Department's Committee on Inclusion and Diversity and by founding oSTEM@UW. Further, to promote the success of mathematicians from minority genders I organized a number of workshops and conferences. If hired by [Institution Name Here] I will work hard to continue to promote these values through my research, teaching, and service.

II. Expanding the Learning Community. The Madison Math Circle (MMC) is an outreach program sponsored by the UW - Madison Math Department. Its goal is to kindle excitement and appreciation of math in middle and high school students. Towards the end of my first semester in graduate school, Fall 2014, I began volunteering with the MMC. At the time, the circle's main programming was a weekly on-campus lecture given by a member of the math department. My role was to assist the speakers in the classroom, and handle all administrative matters that arose during the meeting. After volunteering with the MMC for roughly a year I stepped into the role of student organizer/coordinator.

Over the last two years, I have worked hard to build stronger connections between MMC, local schools and teachers, and other outreach organizations such as the Wisconsin Institute for Discovery, Centro Hispano, etc. These ties have helped the weekly attendance of the MMC more than double, and grow substantially more diverse. Additionally, I have managed to increase the number of women and undergraduate speakers.

I also led the creation of a new outreach arm of the MMC, which visits high schools around the state of Wisconsin to better serve students from underrepresented groups. This program has dramatically expanded the reach of the circle. For example, during 2017-2018 I planned over 20 visits to high schools around Wisconsin as far as Waukesha, Whitewater, and Wales that reached hundreds of new students.

III. A More Inclusive Learning Community. During the Fall of 2016, in response to a growing climate of hate, bias, and discrimination on campus, I worked with the Mathematics Department to form a committee on inclusivity and diversity. As a member of this committee I took the lead in drafting a statement on the department's commitment to inclusivity and non-discrimination that was accepted by the faculty at a department meeting. I also worked to create syllabi statements that let students know about these department polices, and that inform them of other campus resources (UHS, MSC, GSCC, McBurney, etc.) that may be helpful. Everyone within the department is now encouraged to use these statements.

More recently, my passion for creating a more inclusive campus has expanded outside of the math department to try and help address inequalities in STEM fields more generally by founding oSTEM@U and organizing qGrads. While a large proportion of students at UW - Madison pursue degrees in STEM adjacent fields there are few – if any – resources on campus directly support LGBT students in STEM. This is despite the fact that many of these fields are home to anti-LGBT sentiments and biases that often cause LGBT students to feel isolated, to feel the need to hide their identity, or even to leave STEM altogether.

In light of this, and my own experiences as an LGBT person in STEM, over the summer of 2017 I co-founded Out in Science, Technology, Engineering, and Mathematics at UW (oSTEM@UW) as a resource for these students. After its founding this group grew dramatically, eventually having fifty active members. The efficacy and importance of such a group was made clear by the numerous student comments indicating how helpful and encouraging oSTEM@UW is to them. For example, after a meeting, a student emailed me to say, "It made me very happy to see other friendly LGBTQ+ faces around, and I got to meet two people who were already in classes of mine! Thanks so much for organizing this stuff – it's really helpful for me personally, and I believe it was encouraging for the others attending as well."

In addition to my work with oSTEM@UW I am currently the organizer for qGrads, a social organization for LGBTQ+ graduate students and post-graduate students at the University of Wisconsin - Madison. In this role I co-organized weekly coffee social hours intended to give LGBTQ+ graduate and post-graduates students a place to relax, make friends, and discussion the challenges of being LGBTQ+ at the UW - Madison.

IV. Organizational Service. In the Spring of 2017 I organized a one day professional development conference on STEM careers outside of academia, and how graduate students should prepare for these careers. This was attended by over 50 people from many departments; including numerous undergraduates, and a handful of individuals from the greater Madison area. In organizing this conference I paid particular attention to ensuring a diverse speakers. In particular, I worked hard to find numerous women and international presenters who could speak to specific challenges these groups face when transitioning to jobs outside of academia. In follow-up surveys almost every respondent said the conference changed how they look at careers outside of academia, and how they will approach professional development in the future.

More recently, in the Winter of 2019 I am organizing *Geometry and Arithmetic of Surfaces* (G&AoS); a weekend long workshop aimed at providing a diverse group of early career researchers the opportunity to learn about specific topics in the arithmetic and algebraic geometry of surfaces from a diverse set of prominent active researchers. Of the four plenary speakers three are from generally underrepresented groups with two women and one person of color speaking. Additionally, of the approximately 50 registered participants over 30 identify as either female or non-binary researchers.

I am also organizing the *Graduate Workshop in Commutative Algebra for Women and Mathematicians of Minority Genders* (GWCAWMMG). This workshop, which will take place in the Spring of 2019, focuses on forming a community of women and non-binary researchers interested in commutative algebra. A key goal of this workshop is to give young graduate students from minority genders, role models for the next stage in their careers. Giving students access to such role model can act as a "social vaccine" against negative stereotypes that often contribute to attrition among students of minority genders. [1]

When organizing these conferences I paid particular attention to making them as inclusive of women and non-binary researchers as possible. For example, I designed the registration form to be thoughtful of the concerns of transgender researchers, implemented the process of putting pronouns on name tags, highlighted the locations of single occupancy and ADA compliant restrooms, and received in-cooperation status from the Association for Women in Math for both G&AoS and GWCAWMMG. The importance of such efforts was highlighted by the following comment I received from a participant, "I just wanted to thank you for making this workshop inclusive for people with all gender identifications. As a non-binary biologically female person I have always felt out of place

[1] N. Dasgupta, Ingroup Experts and Peers as Social Vaccines Who Inoculate the Self- Concept: The Stereotype Inoculation Model, Psychological Inquiry, 22(4), 2011, 231-246, DOI: 10.1080/1047840X.2011.607313.

when I participated in conferences/workshops for women when they do not specify that non-binary people are welcome or just assume I am female. I really appreciate those questions you put in the registration form. It means a lot to me."

V. Conclusion. As a graduate student I worked hard to develop programs, policies, and practices that promoted diversity, inclusion, and justice within the mathematical and academic communities. As I move forward in my career I hope to continue, and expand upon, this work. If hired by [Institution Name Here] I will work hard to continue promoting these values through my research, teaching, and service.