



BROWN

Department of Mathematics

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Juliette Bruce
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Dear Committee Members,

I am writing to apply for a lecturer position in the Department of Mathematics at Stanford University. Currently, I am a postdoctoral researcher in the Mathematics Department at Brown University, a position I have held since August 2022. I received my Ph.D. in Mathematics from the University of Wisconsin - Madison in 2020 under the guidance of my advisor Professor Daniel Erman. From 2020-2022 I was an NSF Postdoctoral Fellow in the Mathematics Department at the University of California, Berkeley.

My research interests lie in the intersection of algebraic geometry and commutative algebra. In particular, I am interested in using combinatorial and homological methods to study the geometry of algebraic varieties. Further, I am passionate about promoting inclusivity, diversity, and justice in the mathematics community. This passion extends throughout my teaching where I am dedicated to creating an interactive, engaging, and supportive classroom environment that helps students thrive.

Despite my recent positions having excluded formal teaching duties, I have found novel ways to explore my passion for teaching and supporting students. For example, I have organized multiple online educational opportunities for undergraduate math students, including two summer research programs and a virtual directed reading program in algebra and geometry. Further, I have worked to support LGBTQ+ and other minority students by organizing events that help such students find mentors and support.

With my application I have included my curriculum vitae, my publication list, a brief teaching statement with supporting materials, and three letters of recommendation. A few highlights in my file are:

- Capstone Teaching Award (2019) - Awarded by the Department of Mathematics at the University of Wisconsin to 1 student recognizing a record of exceptional teaching and service.
- Teaching Assistant Award for Exceptional Service (2018) - Awarded by the University of Wisconsin to up to 3 teaching assistants campus-wide recognizing their exceptional service.
- Excellence in Mathematical Research Award (2020) - Awarded by the Department of Mathematics at the University of Wisconsin for substantial contributions to research as part of a thesis.

Please contact me with any questions, and thank you in advance for your consideration.

Sincerely,

Juliette Bruce