



Juliette Bruce  
Postdoctoral Researcher  
Department of Mathematics  
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Dear Committee Members,

I am writing to apply for the [POSITION NEEDED] in the [PLACE NEEDED]. 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 and supportive classroom environment that helps students thrive.

With my application, I include the standard AMS cover sheet, a curriculum vitae, a research statement, and a teaching statement. I will have five letters of recommendation. Four research letters: Christine Berkesch (cberkesch@umn.edu), Melody Chan (melody\_chan@brown.edu), Daniel Erman (erman@hawaii.edu), and Gregory G. Smith (ggsmith@mast.queensu.ca), and one teaching letter from Shirin Malekpour (shirin.malekpour@wisc.edu).

Please do not hesitate to contact me with any questions, or if there is anything else I can provide, and thank you in advance for your consideration.

Sincerely,

Juliette Bruce  
Postdoctoral Research Associate