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December 1, 2015

## Dear Members of the Search Committee:

My name is Jaclyn Lang, and I am applying to the Assistant Professor of Mathematics position at Mt. Holyoke College. I will receive my Ph.D. from UCLA in June 2016. As a student at Bryn Mawr, my professors embodied the teacher-scholar ideal. Their example guided my development through graduate school as I developed my research program in number theory while honing my teaching skills to address the needs of the diverse undergraduate student body at UCLA.

My research is in the area of algebraic number theory. The main result of my thesis, which concerns the size of the images of certain Galois representations, will appear in *Algebra and Number Theory*. Furthermore, as part of the Women in Numbers 3 Workshop my collaborators and I developed an algorithm that allowed us to compute the first examples of "shadow lines" - a certain invariant associated to elliptic curves. Our paper will appear in the peer-reviewed conference proceedings. One of my future research projects will combine computation and Galois representations, a project on which I would like to work with undergraduate researchers. Thus, I am especially excited about the possibility of becoming a mentor at the Mt. Holyoke REU. The Five College Number Theory Seminar, where I spoke in September, indicates that Mt. Holyoke is part of a strong number theory community that will support my research program.

I am committed to advocating for and supporting underrepresented minorities in mathematics and the sciences through my teaching and mentoring. In 2012 I was a teaching assistant and mentor for the Summer Program for Women in Mathematics at George Washington University, a program for undergraduate women majoring in math from around the country. I was honored to receive the 2014 Distinguished Teaching Award from the UCLA Mathematics Department. As a Teaching Assistant Consultant at UCLA, I developed curriculum to teach new TAs about pedagogy, including a guest lecture on stereotype threat from a professor of social psychology.

Thank you for your time and consideration. I look forward to talking with you.

Sincerely,

Jaclyn Lang

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