

**Michael Musty** • 55 Church Street • Piermont, NH, 03779

Jennifer Balakrishnan  
111 Cummington Mall  
Boston, MA, 02215

Piermont, NH, USA, December 1, 2018

Dear Professor Balakrishnan,

I am writing to you about the Simons post-doctoral position you have available at Boston University. I am a PhD student at Dartmouth College working under the supervision of John Voight. I have been working in the area of computational number theory and arithmetic geometry since 2012 (coinciding with my first interactions with John Voight at the University of Vermont). My interests and skills align nicely with the Simons collaboration and this position.

Programming has been a large part of my research, and a strong programming background is what I bring to the table for this position. Over the years I have used a wide range of languages and programming techniques to tackle difficult problems in arithmetic geometry and have become a proficient coder. I have experience working on large-scale team projects and executing my tasks in the context of the team effort. Large team projects related to the LMFDB and effective Falting's theorem need trusted individuals to delegate work to. I enjoy taking on challenging (or even annoying!) mathematical programming problems and making them happen with readable elegant code.

I am excited at the prospect of helping to push forward your successful work on studying rational points and being an asset you can count on in your research group. I am a huge fan of the efforts of the Simons collaboration, and I look forward to the future of the collaboration regardless of my involvement.

Thank you for your consideration,



Michael Musty