

Dear Members of the Selection Committee for the Postdoctoral Fellow Position at the University of Toronto,

I am currently a PhD student in Mathematics at the University of Wisconsin-Madison, and expect to graduate in the coming spring. My Research Interests lie primarily in harmonic analysis, spectral geometry, geometric measure theory, and the study of nonlinear wave equations. My thesis problem focuses on studying spectral multipliers on compact manifolds using methods of Fourier integral operators, which I am working on under the supervision of Professor Andreas Seeger.

If awarded the postdoctoral position, I hope to work with Professor Ignacio Uriarte-Tuero. Professor Uriarte-Tuero has done work on fractal geometry on multilinear geometry, and I am greatly interested in seeing how two of my main research interests, geometric measure theory and spectral geometry related to harmonic analysis, can be applied to similar problems. More information about prospective research can be found in my research statement.

Thank you for your consideration,

Jacob Denson