

Dear Members of the Postdoctoral Fellowship Selection Committee at the University of Missouri-Columbia,

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 your Postdoctoral Fellowship, I hope to work with Professor Loukas Grafakos. I believe techniques from multilinear analysis can be used to extend current state of the art bounds for characterizations of L^p for multiplier operators, as described in my Research Summary. Professor Graffakos is an expert in multilinear harmonic analysis, and has recently put out several papers on the boundedness of multilinear variants of Fourier multipliers of Hörmander type. A position at the University of Missouri-Columbia would thus greatly enrich my postdoctoral work.

Thank you for your consideration,

Jacob Denson