640 Ferry Street Lafayette, Indiana 47901 USA

To whom it may concern,

I am writing to apply for the position of Postdoctoral Scholar under the NSF RTG grant in Combinatorics, Geometry, Representation Theory, and Topology, in the Department of Mathematics at the University of Oregon (position ID 20659, 53030).

I am a Ph.D. candidate at Purdue University, under the direction of D.B. McReynolds. I expect to complete my degree by May of 2023. My research interests include geometry and topology, spectral theory, number theory, representation theory, harmonic analysis, and interactions thereof. My thesis work concerns an absolute spectral rigidity result, which applies to a large class of arithmetic hyperbolic 2 and 3 manifolds. One application of this theorem proves that all principal congruence Hurwitz surfaces are spectrally rigid. I have also co-authored a paper in which we construct large collections of algebraic and differential geometric objects which are indistinguishable by means of various invariants.

While pursuing my undergraduate at Reed College, I had an opportunity to travel to Eugene with Prof. K. Ormsby, a professor with whom I was working. While visiting, I had an opportunity to speak with Prof. D. Dugger. I found this experience to be quite enriching. I greatly enjoyed my years living in the Pacific Northwest, and would cherish an opportunity to return.

I consider teaching to be an essential role of the mathematician, and am committed to fostering a safe, inclusive, and open environment for students.

Please find my curriculum vitae and research and teaching statements attached. Letters in support of my application, written by D.B. McReynolds, M. Stover, J. LaFont, A. Reid, and J. Chen, will be submitted through the forms on math-jobs.com. Please contact me for any further information.

Sincerely,

Justin Katz Mathematics Department Purdue University 1610 Purdue Mall West Lafayette, IN 47907 (219) 210-9452 jukatz93@gmail.com