

Krystal Taylor, Associate Professor of Mathematics, The Ohio State University
<https://u.osu.edu/taylor.2952/>



Dr. Taylor is an Associate Professor of Mathematics at The Ohio State University where she has been since 2015. Prior to that, she had positions at the *IMA* at the University of Minnesota from 2013 to 2015, and at *Technion – Israel Institute of Technology* in 2012 and 2013. She’s also served as a Research Fellow at the Mittag Leffler Institute in Stockholm and as a Visiting Scholar at ICERM at Brown University in Providence. She completed her PhD in 2012 at the University of Rochester, working under the direction of Alex Iosevich.

Her research centers around harmonic analysis, geometric measure theory, analytic number theory, and combinatorics. In a broad sense, she studies and develops tools to understand the geometry of fractal sets. A recurrent theme is her use of the Fourier transform and generalized projection theory. Applications include the study of distances, sums, and products. Her contributions include the best-known upper and lower bounds on the Favard curve length problem, and pioneering the study of finite point configurations over fractals.

In addition, she organized one of the first international workshops in harmonic analysis and fractal sets in the midwest: HAFS2017 and HAFS2023, and created the Math to Industry seminar designed to help students see how to use their mathematics to secure interesting and rewarding jobs.