

Large sets without Fourier restriction theorems

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Fourier restriction inequalities are classical objects of study in harmonic analysis and have deep connections to other problems. We will focus on the case that the Fourier transform is restricted to a fractal. The class of fractals is extensive and many different Fourier restriction properties can be observed, but necessary conditions are not well understood. In this direction, we will show that all Fourier restriction sets avoid a universal set of full Hausdorff dimension.