

Title: Fourier uniqueness pairs and interpolation formulas

Abstract: A Fourier uniqueness pair is a pair of subsets A, B of Euclidean space such that any function can be reconstructed from its values on A and the values of its Fourier transform on B . I will talk about recent analytic and number-theoretic constructions of Fourier uniqueness pairs and discuss their applications in sphere packing and energy minimization problems.