

Fourier restriction, Bessel functions, and beyond

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This talk will be a brief survey on the problem of finding the sharp forms and classifying the extremizers of some Fourier restriction inequalities. I will present some recent results on the sharp form of a mixed norm Fourier extension inequality first proposed by Luis Vega in his Ph.D. thesis (Madrid - 1988). This problem has interesting connections to questions of independent interest in the theory of special functions. The talk will be accessible to a broad audience, with a minimal background in Analysis.