ABSTRACT FOR BETSY STOVALL'S TALK

Title: On extremizing sequences for adjoint Fourier restriction to the sphere

Abstract: In this talk, we will describe recent work with Taryn C. Flock developing a linear profile decomposition for the $L^p \to L^q$ adjoint Fourier restriction operator associated to the sphere, valid for exponent pairs $p < q$ for which this operator is bounded. This result, new when $p \neq 2$, has implications for the behavior of extremizing sequences for the spherical extension operator, including new existence results for extremizers for certain values of p, q. In particular, the $L^p \to L^q$ extension operator is extremizable more often than not.

REFERENCES

1