

HARMONIC AND SPECTRAL ANALYSIS

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L^p - L^q Fourier multipliers on hypergroups

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(joint work with MICHAEL RUZHANSKY)

In this talk, we will discuss Hörmander's L^p - L^q boundedness of Fourier multipliers on commutative hypergroups. We will also deduce the L^p - L^q boundedness of the spectral multipliers for the generalized radial Laplacian by examining our results on Chébli-Trimèche hypergroups. As a consequence, we obtain embedding theorems and time asymptotics for the L^p - L^q norms of the heat kernel for generalized radial Laplacian.