

1086-26-1047

Javad Namazi* (namazi@fdu.edu). *A Generalized Riesz transform.*

Let $T(f) = \sum_{n=0}^{\infty} (2n + d)P_n(f)$ be the spectral decomposition of $L^2(\mathbb{R}^d)$, where $P_n(f) = \sum_{|\alpha=n|} \langle f, h_\alpha \rangle h_\alpha$ are the spectral projections with h_α being the multidimensional Hermite function in $L^2(\mathbb{R}^d)$, and where α is a multi-index. We discuss some properties of T in $L^2(\mathbb{R}^d)$ as well as in weighted spaces. (Received September 18, 2012)