Besov-Hankel norms in terms of the continuous Bessel wavelet transform

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Abstract

Using the theory of continuous Bessel wavelet transform in $L^2(\mathbb{R})$ -spaces, we established the Parseval and inversion formulas for the $L^{p,\sigma}(\mathbb{R}^+)$ -spaces. We investigate continuity and boundedness properties of Bessel wavelet transform in Besov-Hankel spaces. Our main results: are the characterization of Besov-Hankel spaces by using continuous Bessel wavelet coefficient.

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