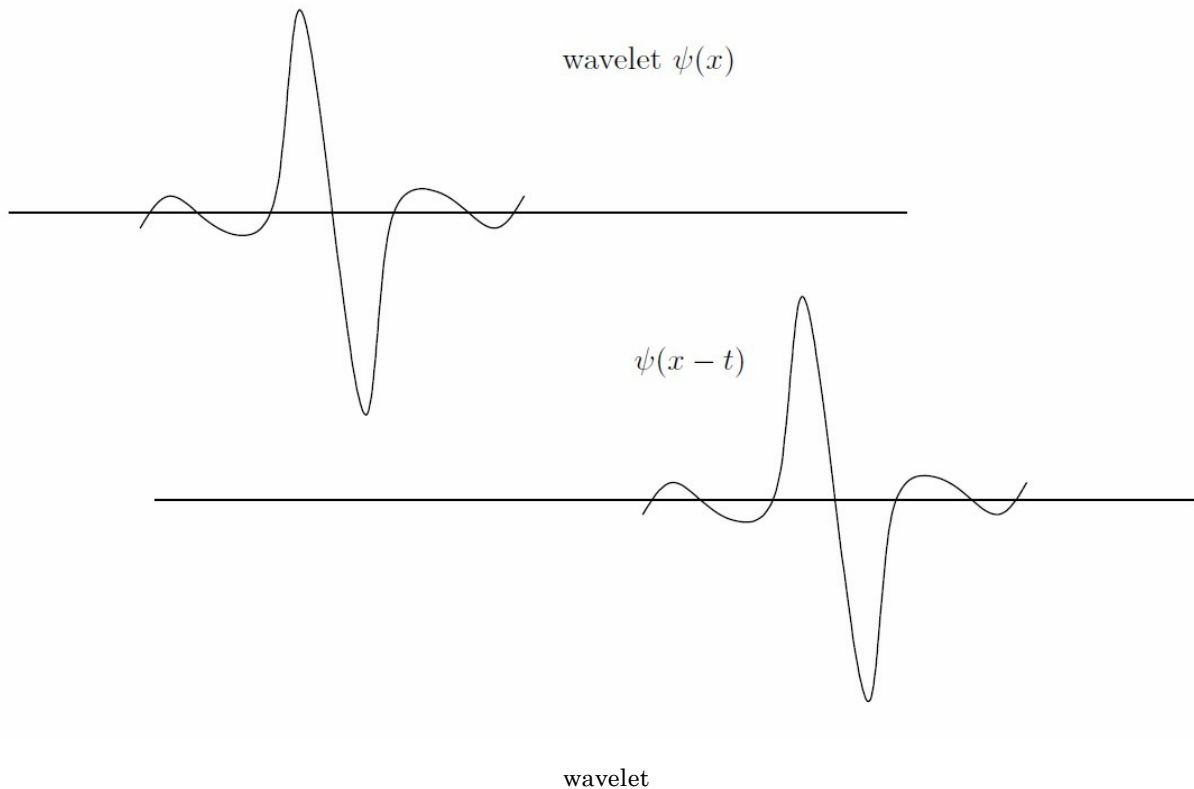# Fourier and wavelet analyses, theory of function spaces

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wavelet

My research field is the theory of wavelets and function spaces. Besov and Triebel-Lizorkin spaces are natural extensions of Sobolev and Hölder spaces. Several characterizations of those function spaces are given in terms of wavelets. Littlewood-Paley theory plays an important role in this research field. I also try to establish an interpolation theorem for weighted Lorentz spaces.

Keywords : Fourier, wavelet, function space