

Anisotropic transform on the sphere

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Motivated by various applications, wavelets on the sphere have been extensively studied and directional multiscale transforms on the sphere further developed. However, none of them use anisotropic dilation which is crucial for analyzing the anisotropic features of data and theoretical analysis for their performance has not been considered yet.

For this talk, we introduce a multiscala transform with anisotropic dilation on the sphere and discuss how it can be used to analyze the anisotropic structure of data on the sphere.