

# Spherical Shearlets, an extension of Wavelets on sphere

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## **Abstract**

Firstly let's review some old results that I gave about the spherical shearlets: the definition, the admissible condition and a reconstruction formula, and a thorough discussion of its largely simplified necessary and sufficient form in different function spaces.

Secondly I will show the results of my recent work, namely I constructed a nearly tight frame, and a tight frame for zero-mean functions on sphere.

All of these results are general in the sense that they apply to the spherical wavelets as well.