Algorithm of Decomposition and Reconstruction with Orthogonal Multiwavelet Packets with Random Scale*

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ABSTRACT

This paper is based on the construction of orthogonal multiwavelet packets with random scale. They are more flexible in their application. The space $L^2(R)$ can be decomposed by using these multiwavelet packets. Finally the algorithm of decomposition and reconstruction with these orthogonal multiwavelet packets is the main result of this paper.

Keywords: orthogonality, multiwavelet, multiwavelet packets, scale, scaling vector, matrix series with random scale.

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