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AN EXTENSION APPROACH TO THE CONSTRUCTION OF BALANCED BIORTHOGONAL SCALING VECTORS

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Abstract

In this paper, we are concerned with the construction of balanced biorthogonal multiscaling functions with prescribed properties. The new balanced multiscaling functions are investigated starting at the linear combination of the integer translates of a pair of existed biorthogonal multiscaling functions. An example with Sobolev exponents is presented.

Key Words: Approximation order, Balanced order, Biorthogonality, Multiscaling function.

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