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Abstracts of Short Communications and Posters

Section:

15. Numerical Analysis and Scientific Computing

1991 MS Classification: 65, 42
Karoui, Abderrazek, Faculté des Sciences de Bizerte, Tunisia
Wavelets: Construction and quality of approximation
We construct biorthogonal wavelet filters with parametric coefficients. These filters give use to compactly supported wavelet bases of $L^2(IR)$. The Sobolev regularity of the constructed wavelets is estimated by the use of a practical numerical method. Finally, we give some conditions that ensure the uniform approximation by wavelets in the Hölder spaces.