

Tree-Structured Wavelets in Nonparametric Regression

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Wavelet thresholding provides a powerful tool for nonparametric function estimation. There exists several thresholding methods but the leading ones are those which incorporate the information from neighbor wavelet coefficients. Among them, we consider the class of tree-structured wavelet estimators (see, e.g., Baraniuk, 1999) and particularly the construction of Engel (1999). We emphasize the ability of the recent theory of maxisets (Kerkyacharian et Picard, 2002) to assess their powerful optimality properties (Autin, 2008).

References

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