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## Highlights

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### Multiscale Methods and Statistics: A Productive Marriage

The current issue of *Statistica Sinica* presents a variety of papers on the application of wavelets and multiscale methods in the diverse areas of analysis, signal processing, statistics, stochastic processes and others. The wavelet “revolution” started about 20 years ago and brought to life hundreds of books and papers that studied the subject from various points of view. Although the potential of wavelet methods has been largely explored, the present volume demonstrates that multiscale methods and wavelets remain a flourishing and developing field.

Through a series of 10 articles, this special issue highlights the wide range of areas where multiscale methods and wavelets are applied. The topics range from object detection in a noisy image to estimation of an unknown function based on non-equispaced observations with heavy-tailed noise, from DNA isochore detection based on estimation of a binomial parameter to partial regression models, from estimation of the Hurst parameter for long-range dependent processes to using overcomplete dictionaries of continuously parametrized wavelets. In summary, the papers in the volume confirm that multiscale methods and wavelets remain the tool of choice for both the analysis and conceptualization of data, and the solution of theoretical and applied statistical problems. We are also extremely fortunate to have invited editorials by two legendary figures in the area of wavelets: Professors David Donoho and Bernard Silverman.

We hope that this special issue will stimulate a new wave of interest in the field of wavelets and lead to exciting new results in estimation on the basis of long-range dependent data, in genome sequencing, analysis of internet traffic, and many, many other fields.

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