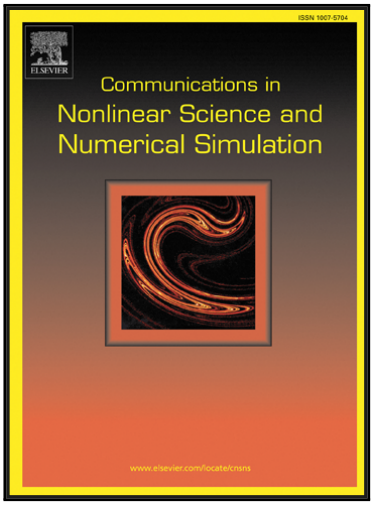

An algorithm for computing non-concave multifractal spectra using the S^{ν} spaces

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Highlights

- In this work, we present an implementation of a multifractal formalism based on the S^v spaces and show that it effectively gives the right Hölder spectrum in numerous cases. In particular, it allows to recover nonconcave spectra, where other multifractal formalisms only lead to the concave hull of the spectra. The proposed method is also more robust when spurious data are encountered. This work should provide additional fractal informations for many real-life data, such as signals from fully developped turbulence.