

## An Application of Fast Integral Wavelet Transform to Waveguide Mode Identification

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*J.C. Goswami, A.K. Chan and C.K. Chui. "An Application of Fast Integral Wavelet Transform to Waveguide Mode Identification." 1995 Transactions on Microwave Theory and Techniques 43.3 (Mar. 1995 [T-MTT]): 655-663.*

We introduce a very efficient method for computing the integral wavelet transform, with any compactly supported spline-wavelet as the analyzing wavelet, on a dense set of the time-scale domain. While the mathematical analysis of this algorithm will be presented elsewhere, the objective of this paper is to describe the computational scheme along with its computer implementation, and to demonstrate its effectiveness in the identification of mode propagation in a rectangular waveguide.

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