

数学与系统科学研究院

计算数学所学术报告

(定期学术报告)

报告人: 王红霞(博士后)

报告题目:

**Analytic Wavelet Based Image
Representations and Its Applications**

合作导师: 袁亚湘研究员

报告时间: 2007年10月24日(周三)

下午4:00—5:00

报告地点: 科技综合楼三层311

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Abstract:

The multi-dimensional analytic complex

wavelet analysis for the processing of digit images are introduced in this report.

The nD generalization of 1D analytic wavelet is presented and the relationship between instantaneous phase and image features is investigated. The construction of Hilbert transform pair, which is the kernel of analytic complex wavelet is considered. A new algorithm to construct DTCWT is proposed. DTCW filter banks with rational-coefficients are obtained by choosing proper parameters. At last two applications of analytic wavelet are presented.

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