

**Meeting:** 998, Houston, Texas, SS 3A, Special Session on Harmonic and Functional Analysis

998-94-220      **Jianzhong Wang\*** (mth\_jxw@shsu.edu), Sam Houston State University, Department of Mathematics and Statistics, Huntsville, TX 77341-2206. *Multi-layer Spline-Wavelet Transforms and it Application in Image Processing.*

Spline-wavelets are constructed by certain derivatives of spline functions, which have simple structure. The smoothness of a spline is dependent on its order. In this paper, we discuss how to use the different layers of spline-wavelet transforms of a function to represent a function and how to apply the representations in image processing. (Received February 27, 2004)