

Meeting: 1003, Atlanta, Georgia, SS 27A, AMS-SIAM Special Session on Analysis and Applications in Nonlinear Partial Differential Equations, I

1003-44-1253 **George K. Yang*** (gyang@tnstate.edu), Professor George K Yang, Dept. of Physics & Mathematics, Tennessee State University, Nashville, TN 37209. *Using Schwartz Functions in Multiresolution Analysis.*

We find a Schwartz function that has very nice properties. Due to the smoothness and compact support of the function, we can form a prospectively useful analyzing wavelet and an orthonormal wavelet basis for the space of square integrable functions. (Received October 04, 2004)