

1067-Y5-1752 **Edward F Aboufadel*** (aboufadel@gvus.edu), Dept. of Mathematics, A-2-178 MAK, Allendale, MI 49401. *Using Wavelets and Statistics to Detect Differences*. Preliminary report.

In this talk, we will describe what undergraduate students can learn from applying statistics to wavelet coefficients, and why this statistical approach has been used the past decade to study imitations of famous artists, forgeries of handwriting, and time series data from biology. The main idea is that wavelet filters can be used to detect subtle differences. (Received September 21, 2010)