

1096-Q1-1166 **Malena Ines Espanol*** (mespanol@uakron.edu), Department of Mathematics, The University of Akron, Akron, OH 44325-4002. *Wavelet-Based Multilevel Methods for Eigenvalue Problems.*

The discrete wavelet transform provides restriction and prolongation operators for multigrid-type iterations. In this talk, we will outline a wavelet-based multilevel method to solve discrete eigenvalue problems. We will show the results of a summer undergraduate research project where this method was used to solve the discrete time-independent Schrödinger equation. (Received September 13, 2013)